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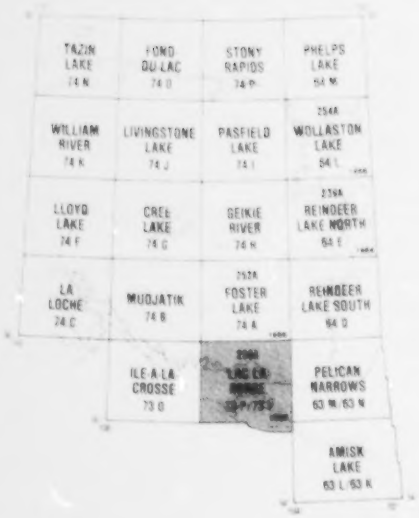
Report 255

Metallogenic Map Series:

Lac la Ronge, NTS Areas 73P/73I

First Edition, 1988

compiled by Blaine P. Scott


TAZIN LAKE 74 N
FOND DU LAC 74 O
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PHELPS LAKE 64 M
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LIVINGSTONE LAKE 74 J
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254A WOLLASTON LAKE 64 L
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89-02425/

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Printed under the authority of the
Minister of Energy and Mines

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Parts of this publication may be quoted if credit is given. It is recommended that reference to this report be made as follows:

Scott, B.P. (1988): Metallogenic Map Series, Lac la Ronge, NTS Area 73P/73I; Saskatchewan Energy and Mines, Report 255, 29p (accompanied by 1:250 000 scale map).

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Mineral Development Branch

Final draft received July 1988
Text to typesetter July 1988
Printed September 1988

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Metallogenic Notes

The main types of mineralization in the Lac la Ronge area are:

1) gold in quartz-sulphide veins in sheared quartz diorite, granodiorite, quartz monzonite, granite, metavolcaniclastics, 'lean' sulphide facies iron formation, feldspar porphyry and gabbro of the La Ronge Domain (64);
2) copper in metasedimentary, metavolcanic and basic to ultrabasic plutonic rocks and shear zones;
3) nickel in basic to ultrabasic plutonic rocks;
4) iron sulphides in metamorphosed and migmatized supracrustal rocks;
5) low-grade sulphide occurrences with lead as an accessory mineral in psammitic to pelitic gneiss and schist in the Nut Bay Belt; the Nut Bay Belt is lithologically similar and appears transitional to the Nemeiben Zone, but has more strongly foliated biotitic and/or hornblendic granodiorite gneisses;
6) low-grade silver mineralization with sulphides in fractures and shear zones in metasediments and metavolcanics in the Nut Bay and Crew Lake Belts; the Crew Lake Belt and Nemeiben Zone comprise predominantly biotitic pelitic to psammitic metagreywackes and other volcanogenic metasediments;
7) molybdenum in pegmatites near Nemeiben Lake;
8) zinc in calc-silicate beds and biotitic metasediments (e.g., the zinc-lead deposit at Borys Lake (SMDI No. 848));
9) uranium in pegmatites; and
10) miscellaneous mineralization, including talc and asbestos in the La Ronge Domain and talc and feldspar in the Glennie Domain.

1) Gold Mineralization

The Star Lake Pluton, found immediately to the north of the Island Lake Pluton, is host to the Star Lake Mine in NTS area 73P-16 and to the Jolu (Decade Mine) deposit and the Rod zone in NTS area 74A-01 (SMDI Nos. 901 and 1877). These are all characterized by gold-quartz mineralization structurally controlled within shear zones striking 060°.

Exploration for gold in the La Ronge map area has focussed primarily around Star Lake in the Central Metavolcanic Belt and around Sulphide Lake in the Nut Bay Belt. The "Star Lake" or "21 zone" style of mineralization is characterized by quartz-pyrite-gold veins emplaced within northeasterly-trending ductile to ductile-brittle shear zones cutting the Star Lake Pluton. Gold mineralization occurs within and along the margins of the pluton, and includes the 21 zone of the Star Lake Mine (SMDI No. 889b) and the Kahn 18 (SMDI No. 889a), Rush Lake (SMDI No. 890) and Tamar (SMDI No. 891) deposits (64, 249, 437, 369, 370). Other plutons of the Central Metavolcanic Belt may possess an equally high potential for a similar style of mineralization to that found at Star Lake.

The Star Lake property straddles the contact between the intrusive Star Lake Pluton (a roughly concentrically zoned body with an older dioritic margin and younger granite core) and a supracrustal suite of tholeiitic and calc-alkaline metabasalts and volcanogenic metasediments. A northeast-trending dyke swarm ranging from early mafic to younger felsic dykes cuts the pluton. During a late regional post-folding deformation, subvertical northeasterly-trending shear zones developed and dilatant areas in these zones were filled by quartz-pyrite veins which contain minor chalcopyrite and gold, as well as trace amounts of scheelite, chalcocite and pyrite. One of these, the 21 zone (SMDI No. 889b) in the quartz-monzonite phase of the Star Lake Pluton, comprises massive quartz and euhedral pyrite. The 21 zone has a strike length of 80 m, a width of 1 to 13 m and a vertical extent of more than 180 m, and plunges moderately to steeply to the southwest. The 21 zone shear structure is at least 700 m long within the Star Lake property boundaries and probably extends much further to the northeast and southwest. Drill-indicated reserves of 209 000 tonnes grading 17 g/t Au to a depth of more than 180 m were announced (64).

The Kahn 18 deposit (SMDI No. 889a), 25 m southeast of the 21 zone, although erratic in grade, occurs in a 1.5 to 1.8 m wide shear structure that is parallel to the 21 zone structure and has been traced along strike for 250 m. The Rush Lake deposit (SMDI No. 890) is hosted by diorite and outcrops 2100 m north of the 21 zone. Very fine grained native gold, pyrite and chalcopyrite occur sporadically in quartz veins 1 to 3 m wide, 120 m long and grading 13 g/t Au. Reserves are estimated at 17 000 tonnes grading 10.2 g/t. At the Tamar occurrence (SMDI No. 891), a northeast-trending shear zone with local pyritized quartz veins transects the contact between metavolcanics and the dioritic margin of the Star Lake Pluton. Diamond-drilling returned erratic values of up to 21 g/t Au over 61 m in quartz vein-hosted mineralization in the marginal diorite.

Discoveries of high-grade gold have recently been made at two locations on a northeast-striking, near-vertical shear zone which cuts the granitic rocks of the Island Lake Pluton. One, the Fork Lakes prospect (SMDI No. 2073), is 4.5 km south of the 21 zone and includes the Jasper, Roxy and Muskeg zones (367, 370, 307, 310); the other, the Joyce zone (SMDI No. 2066), is 6 km south-southwest of the 21 zone and occurs in a small dioritic sill or plug emplaced in highly strained metavolcanic rocks (307). The James zone is the southerly extension of the Jasper and Muskeg zones.

At the Fork Lakes prospect, the mineralization has been traced over a strike length of 550 m and a width of 2.5 to 3.5 m. Drilling to date has identified three ore shoots (310) plunging to a depth of over 100 m in the Jasper and Muskeg zones. Drill core from the Jasper

and Muskeg zones assayed 13 g/t over 1.5 m and 13 g/t over 5.5 m, respectively, and one drillhole on the Roxy zone gave 24 g/t over 4.5 m, 11 g/t over 1.5 m and 12 g/t over 3.5 m. Initial drilling on the James zone indicates gold mineralization along a strike length of 170 m to a depth of 43 m. Seven drillholes yielded a range of values from 207 g/t over 3.7 m to 0.88 g/t over 6 m with a weighted average of 57.1 g/t over 3 m. Drilling to date indicates that the Joyce zone is narrow and somewhat erratic in grade; assays on drill core from five holes gave from 3.1 g/t over 0.4 m to 16 g/t over 0.7 m, with a weighted average of 9 g/t over 1.5 m.

Mineralization at both the Fork Lakes prospect and the Joyce zone consists of native gold and gold in pyrite in variably sheared quartz veins within the major northeast-striking shear structure.

In the Sulphide Lake-Pap Lake area, both stratiform and structurally controlled mineralizations are represented by lenses and veinlets of quartz containing ubiquitous pyrite, local arsenopyrite, pyrrhotite and ankerite, and rare chalcopyrite, galena and sphalerite. Gold occurs as blebs in pyrite and as pinpoint-sized flakes in quartz veins and on fractures.

At Sulphide Lake, mineralization is mainly of stratiform type and associated with a carbonaceous 'lean' iron formation (18, 64, 392) in the A, B and F zones (SMDI No. 763) and the Galena showing (SMDI No. 757). Other iron formation horizons are present in the Studer D and E zones (SMDI No. 763) and the Gem zone (SMDI No. 761). Drilling of the Studer A zone near Sulphide Lake indicated a 2.4 m wide and 230 m long zone to a depth of 230 m with estimated reserves of 145 000 tonnes grading 7.5 g/t Au. Discordant mineralization occurs locally, comprising transverse tension gashes and veins parallel to axial planes of small-scale folds. The B zone is estimated to contain 159 000 tonnes grading 7.5 g/t Au. In the C zone, which consists of irregular quartz stockworks in feldspar porphyry/volcaniclastics, drilling has indicated 16 000 tonnes grading 14.4 g/t Au in three parallel zones. In the D zone, arsenopyrite and pyrite occur in quartz veins in volcaniclastics; an average grade of 4.0 g/t Au is obtained across four trenches. Intercalated iron formation and volcaniclastics occur in the nearby E zone; the grade is unknown. Drilling on the Gem zone (SMDI No. 761) returned values up to 9.5 g/t Au over a width of 4.3 m and, at the Galena showing (SMDI No. 757), outlined two lenses: a north lens averaged 1.8 g/t Au over 2.4 m for a length of 180 m and a south lens averaged 1.8 g/t Au over 5.3 m for a length of 180 m. Significant values of lead and silver were also reported.

Feldspar porphyry, at the Lucky Strike and Discovery showings (SMDI Nos. 756 and 759) on Sulphide Lake, is host to quartz-pyrite-arsenopyrite-gold veins in a shear zone striking 045°. Rare galena, sphalerite and free gold occur in feldspar porphyry (18, 64).

Gabbroic sills at the Main Camp showing on Sulphide Lake in the Pap Lake area are cut by northeast-trending zones which contain veins of quartz, pyrite, arsenopyrite and rarely chalcopyrite and gold. In the PAP A zone (SMDI No. 758), which was trenched over a strike length of 150 m, a mineralized width of 1.2 to 1.5 m was estimated, with a potential of 1680 tonnes per vertical metre, grading 5.2 g/t Au. In the PAP B zone, which is located between the PAP A and Preview South zones, quartz-pyrite-arsenopyrite veins of unknown grade, up to 0.3 m wide, occur in shear zones in both gabbro and adjacent lean iron formation.

The PAP Southwest occurrence, located 500 m south-southwest of the PAP A zone, contains several subparallel zones over a width of approximately 150 m. Drilling in the easternmost part (No. 1 zone) indicated mineralization 160 m long and 1.1 m wide, grading 8.8 g/t Au. Free gold is present in the northern trenches. At the Preview South zone (PAP C zone - SMDI No. 754), early trenching indicated a potential of 390 tonnes per vertical metre at a grade of 17 g/t Au. The Preview North zone (SMDI No. 754), which produced a gold brick in 1946, comprises two *en echelon* mineralized shear zones with a combined potential of 600 to 740 tonnes per vertical metre at a grade of 12 g/t Au, in a gabbro sill within metagreywacke. Pyrite and rare arsenopyrite and chalcopyrite locally occur as disseminations, inclusions in quartz veins, veins cutting the quartz and host rocks, and concentrations near the quartz veins. Visible gold is present sporadically in the veins. Gold also occurs in the sulphide minerals.

In the Clearwater A zone (SMDI No. 764), sampling in the two original trenches averaged 13 g/t Au over a width of 1.9 m. Adjacent drillholes averaged 17.3 g/t Au over a 0.9 m width. Traces of gold were found in the Clearwater B zone (SMDI No. 764). Mineralization in both the A and B zones is hosted by silicified and sheared iron formation. Further exploration may locate quartz-pyrite-gold mineralization in 'lean' iron formation bands between Lynx Lake and Contact Lake and in shear zones in the composite gabbroic-granitic Contact Lake Pluton.

Several occurrences at Ramsland Lake (SMDI Nos. 768, 769, 770, 771) comprise irregular veins and fracture-fillings containing quartz, pyrite, chalcopyrite and native gold, which are hosted by deformed and sheared metatuffs and agglomerates, intercalated with conglomerate and andesite-basalt. The Ramsland "Centre showing" (SMDI No. 769), drilled in 1985, yielded intersections of 16.5 g/t Au over 3.5 m and 7.5 g/t over 3 m in the two best holes (362, 93).

At the Radcliffe Resources North Lake showing (SMDI No. 2081), located 5 km north of the Ramsland Lake showings, gold mineralization has recently been discovered in quartz veins cutting pyrite-rich arkosite which is in contact with mafic volcanics along a major fault zone (437). The fault zone is itself sandwiched between the McLennan Lake Tectonic Zone to the west and the Missinipe Thrust. Good gold values persist for a strike length of 600 m; mineralization trends along planes striking 045° and dipping 60° N. Assays from ten drillholes gave results ranging from 3.62 g/t Au over 3.7 m to 39.7 g/t Au over 0.92 m.

At MacKay Lake, the easterly-trending Eureka shear zone (SMDI No. 755) is characterized by quartz-tourmaline-pyrite-chalcopyrite veins which contain rare sphalerite, galena and free gold. Chip samples average 3.4 g/t Au over a strike length of 1200 m and width of 1.5 to 3 m; samples of massive chalcopyrite assayed up to 486 g/t Au, 346 g/t Ag and 6.93 percent Cu. Six drillholes gave assays of 0.34 to 5.5 g/t Au. Near Upises Lake (SMDI No. 765), a northwest-trending shear filled with quartz, pyrite, chalcopyrite, galena and native gold is exposed in three trenches over a length of 25 m. Grab samples from this showing yielded 6.8 to 400 g/t Au and up to 88 g/t Ag.

The Anglo-Rouyn Mine (SMDI No. 732) produced 2104 kg of gold during its operation, for an average grade of 1.001 g/t Au. Gold was probably in fractures and/or solid solution with the sulphides, as native gold was not identified (98; Forsythe, pers. comm.).

2) Copper Mineralization

Low-grade chalcopyrite mineralization is present in easterly-trending fractures in basic to intermediate metavolcanics (basalt, andesite and tuffaceous bands) of the Wapawekka greenstone belt in the Wapawekka Lake area (SMDI No. 675). Chalcopyrite, pyrite and moderately common sphalerite occur in easterly-trending fractures.

The Pitching Lake copper prospect (SMDI No. 801), located in the Glennie Domain, occurs along shear zones within hornblende gneisses containing lenses and layers of calc-silicate gneiss. Three mineralized zones are identified in proximity to the thrust plane sole of the Wapassini Allochthon. The main A zone is located between Drinking Lake and Pitching Lake, and has reserves of 91 000 tonnes grading 2.6 percent Cu over a true width of 6.2 to 9.3 m. It is an irregularly shaped ore shoot bearing disseminated to massive pyrite-pyrrhotite with minor chalcopyrite. The B zone, on which an adit was driven, and the C zone lie 1.6 km and 3.2 km, respectively, north of the A zone. Very low grade copper mineralization occurs at both locations. It has been suggested that "mineralization was probably derived from syngenetic sulphides that were remobilized during a period of metamorphism and concentrated along sheared and brecciated fault zones" (215).

The Anglo-Rouyn Mine (SMDI No. 732), which operated between 1966 and 1972, produced 28 225 741 kg of copper, 2104 kg of gold and 9630 kg of silver from 1 717 100 tonnes of ore at a calculated grade of 1.71 percent Cu, 1.2 g/t Au and 5.5 g/t Ag. The sulphides, accompanied by vein quartz, formed subparallel, *en echelon*, predominantly gently southwesterly-plunging zones in biotitic metasediments that dip steeply northwest. The ore zones lie about 30 m south of the contact between the host metasediments and the sill-like Jepson Lake Granite. Intermittent mineralization has been traced from Ore Bay on Lac la Ronge northeast to Rob Lake, a distance of some 12 km along strike. Intermittent mineralization extends from Ore Bay to the southwest, and possibly in an arc to the Elizabeth Lake deposit (SMDI No. 733a). The presence of pyrite, pyrrhotite and chalcopyrite indicates a low-temperature assemblage formed at less than 334° C. Chalcopyrite was deposited after pyrite and pyrrhotite, with subsequent metamorphism and deformation affecting the ore deposit. Forsythe has suggested that the ore minerals formed as fracture-fillings and, to a lesser extent, as replacements adjacent to fractures, from hydrothermal solutions permeating a fault zone subparallel to the stratigraphy. The solutions may have been related to the intrusive Jepson Lake Granite. An alternative hypothesis is that the mineralization is syngenetic in origin, and that subsequent deformation and metamorphism caused mobilization into fractures (18, 98, 394, 358).

The Elizabeth Lake deposit (SMDI No. 733a) occurs in the arcuate belt of metasediments (mainly biotite gneisses with quartzite, arkose and calc-silicate gneisses), which trends from Nemeiben Lake through English Bay to the Anglo-Rouyn copper deposit. Mineralization comprises veins and disseminations of pyrite, pyrrhotite, magnetite, and chalcopyrite. Galena and sphalerite form local concentrations with chalcopyrite in small lenses of calc-silicate gneiss separate from the main mineralization. Drilling indicates a northeast-trending mineralized zone at a depth of 115 to 420 m and with an average width of 20 m, a minimum length of 242 m and drill-indicated reserves of 6 078 000 tonnes at greater than 1.5 percent Cu and 14.9 g/t Ag. Gold values range from 0.34 to 4.15 g/t (433, 434).

Chalcopyrite is reported in mafic to intermediate metavolcanics in numerous locations throughout the Central Metavolcanic Belt (e.g., in the mineralized trends which include occurrences with SMDI Nos. 818, 820, 816 and 817, as well as SMDI Nos. 872, 874 and 878). Veinlets and disseminations of chalcopyrite are hosted by pyroxenite and gabbro intrusive bodies, including the Gibbons Lake Pluton (SMDI Nos. 893

and 896), the Nipew Lake Pluton (SMDI Nos. 849 and 826) and small plutons in the Rottenstone Domain near McTavish Lake.

Environments judged to have a high potential for copper mineralization include 1) the extensions of the supracrustal belt containing the Anglo-Rouyn and Elizabeth Lake deposits, 2) mineralized shear zones as represented at the Pitching Lake prospect, and 3) gabbro-diorite plutons such as those hosting the Nipew Lake and Neyrinck Lake-Frog Lake occurrences.

3) Nickel Mineralization

Several nickel-bearing basic and ultrabasic plutons occur within the La Ronge Domain. These bodies, which are probably of a similar age to the earliest mafic phases of the composite plutons of the Central Metavolcanic Belt, intrude a variety of host rocks in several different lithostructural subdivisions of the La Ronge Domain. Mineralized zones have been located by magnetic and electromagnetic surveys.

The Nemeiben Lake nickel-copper mineralization (SMDI No. 749) consists mainly of nickeliferous pyrrhotite, rare pentlandite and chalcopyrite. Assays of up to 0.35 percent Cr and 0.15 percent Co were also reported. The mineralized bodies consist of *en echelon* steeply dipping sulphide bands and lenses located near the northern contact of the intrusive. Reserves as of 1973 for the east zone were 2 062 900 tonnes grading 0.35 percent Cu and 0.61 percent Ni with an additional 1 202 300 tonnes possible, and open pit reserves of 4 968 000 tonnes at 0.18 percent Cu and 0.34 percent Ni. The west zone has open pit reserves of 900 000 tonnes grading 1.55 percent Cu.

At the Howard (Little Clam) Lake deposit (SMDI No. 729), 1971 drill-inferred reserves were 54 000 tonnes at 1.03 percent Ni, 0.44 percent Cu and 0.044 percent Co, over a length of 602 m, a width of 1.9 to 9.2 m and to a depth of 21.1 m (for the central part) and 5.2 to 10.4 m (for the extremities). The body is a wedge-shaped sill of coarse-grained gabbro with a core of heavily mineralized pyroxenite, plunging 15° to 20° north-northeast and intruding quartz diorite/biotite gneiss migmatite. Mineralization consists of disseminations, minute fracture-fillings and lenses of sulphides consisting of 60 percent pyrrhotite, 20 percent nickeliferous pyrrhotite and pentlandite, 10 percent pyrite and 10 percent chalcopyrite.

The Gochager Lake Ni-Cu prospect (SMDI No. 880) occurs in a small 700 by 300 m elliptical body of gabbro, hornblendite and quartz diorite which is intrusive into metasediments of the Crew Lake Belt. Massive pods, disseminated blebs and fracture-fillings of nickeliferous pyrrhotite, local chalcopyrite, rare bornite and minor pyrite occur within the core of the gabbro. Drill-indicated reserves in 1968 were 3 866 800 tonnes grading 0.295 percent Ni and 0.081 percent Cu, mineable by open pit methods, with an additional 794 900 tonnes below the planned limits of the open pit grading 0.389 percent Ni and 0.093 percent Cu.

Other basic and ultrabasic intrusive bodies, with low concentrations (0.1 to 0.3 percent) of copper and nickel, are located between the northeast arm of Nemeiben Lake and Flatland Lake, and on Hunt Lake (SMDI Nos. 748 and 789). The Mal Lake occurrence (SMDI No. 836), 7 km north of Otter Rapids, is hosted by quartz diorite. Assays from four diamond-drill holes yielded average values of 0.55 percent Ni and 0.16 percent Cu over 3.4 m in disseminated mineralization. In another hole, 3.05 m of massive pyrrhotite returned 1.41 percent Ni and 0.35 percent Cu.

4) Iron Mineralization

In the Rottenstone Domain, iron sulphides occur in supracrustal rocks and their migmatized equivalents. The supracrustal belt 3.5 km southwest of Eulas Lake contains several gossaned zones of disseminated pyrrhotite, pyrite and local chalcopyrite mineralization. The belt extends for at least 20 km, with mineralization occurring in graphitic metapelites and calc-silicate gneisses. The sulphides are likely syngenetic, but were recrystallized by metamorphism. Iron sulphides (e.g., SMDI Nos. 859, 860 and 861) have been identified in the hornblendic fraction of neosome, and in associated hornblendic gneisses (paleosome) of migmatized supracrustals.

In the La Ronge Domain, most iron sulphide (pyrite-pyrrhotite) showings are located in biotitic metasediments, the remainder being in calc-silicate gneisses and interbanded biotitic and calc-silicate gneisses. In the Glennie Domain, host rocks are interbanded biotite gneisses and amphibolites, calc-silicate gneisses, hornblende gneisses and amphibolites.

5) Lead Mineralization

Several showings with low concentrations of galena occur in the belt of metasediments between Wadin Bay (SMDI No. 750) and the north end of Contact Lake (SMDI No. 791). SMDI No. 750 occurs within a narrow band of feldspar-biotite paragneiss, locally pyritic, trending northeast for 2.4 km. Galena and gold occur in sheared diorite, giving 0.34 to 9.6 g/t Au over 0.9 to 3.1 m (SMDI No. 791). Galena is also found associated with stratabound gold mineralization at Sulphide Lake as in the Galena showing (SMDI No. 757).

6) Silver Mineralization

Erratic silver values accompany quartz-pyrite-pyrrhotite-arsenopyrite-galena-sphalerite-chalcopyrite-gold mineralization, in fractures and shear zones in metasedimentary and metavolcanic rocks between MacKay Lake (SMDI No. 755) and the Galena showing at Sulphide Lake. Two silver showings are identified in the Contact Lake area, hosted by pyritic, malachite-stained epidotized calc-silicate rock with minor quartz veins (SMDI No. 751) and a white quartz vein, containing minor pyrite, within diorite (SMDI No. 752).

The Anglo-Rouyn Mine recovered 9630 kg of silver during its operation for an average of 5.6 g/t Ag. The silver was probably in solid solution with sulphides, as no native silver was observed.

7) Molybdenum Mineralization

Molybdenum mineralization occurs in three deposits in the Nemeiben Lake area in association with granite pegmatites. The Isbister showing (SMDI No. 746), approximately 1000 m west of Elizabeth Lake, comprises molybdenum flakes up to 1.25 cm in diameter in a 0.3 to 0.6 m wide pegmatite sill in granitic gneisses. Showings at Pete (Sucker) Lake (SMDI No. 747a) and southwest of Pete Lake (SMDI No. 747b) are characterized by minor disseminated molybdenite in a granitic pegmatite vein. These occurrences form a trend, parallel to the regional foliation.

8) Zinc Mineralization

At Borys Lake (SMDI No. 848), sphalerite and galena are reported to occur in a major northeast-trending fracture/shear zone, subparallel to the strike of calc-silicate gneiss, biotitic paragneiss and metavolcanic rocks of the Crew Lake Belt. Sulphide mineralization comprises sphalerite with minor amounts of pyrrhotite and galena, and traces of pyrite and chalcopyrite. Silver values of up to 17 g/t are associated with the galena. Mineralization occurs as very fine impregnations, as isolated blebs and clusters, and as veinlets parallel to foliation in the sheared and altered host rock. In the main zone of mineralization, zinc values range from 1.24 to 2.92 percent, and lead values up to 1.1 percent.

To the southwest, on strike with the main zone at Borys Lake, disseminated sphalerite-galena-pyrite is reported in calc-silicate gneisses (SMDI No. 857). Three drillholes encountered an average of 3.5 percent Zn associated with very low values in lead, copper and silver in mineralized bands about 6 to 9 m in width.

Also to the southwest, near Kitchemonia Lake, a similarly hosted occurrence (SMDI No. 858) yielded values of 0.02 to 2.04 percent Zn, 0.04 to 0.1 percent Cu and from 0.34 to 1.0 g/t Au over 1.2 to 1.8 m.

The above-mentioned occurrences (SMDI Nos. 848, 857 and 858) occur within calc-silicate gneisses, biotitic paragneisses and minor metavolcanics on the eastern margin of the Crew Lake Belt. Zinc mineralization is probably syngenetic in origin, but has been locally remobilized (e.g., Borys Lake) and emplaced along northeast-trending fractures in the relatively competent calc-silicate gneiss. Dilatant areas, the result of local changes of attitude of strike faults, may be favourable hosts for deposition of sulphides.

9) Uranium Mineralization

Secondary uranium stain and local concentrations of uraninite have been found in the southeastern part of the area, along the contacts of and within granite pegmatite bodies, intrusive into pelitic metasediments or amphibolites or meta-arkoses with which pelitic metasediments are intermixed. Radioactivity is frequently highest in biotitic zones and sedimentary remnants, and especially in late fractures.

At Lee (Jahala) Lake (SMDI No. 720), uraninite occurs in brownish-red coarse-grained oligoclase in the outer zone of a granite pegmatite body, 76 m long and 5.5 m wide, which dips moderately to the west, broadly concordant with amphibolite. Adjoining the contact, the amphibolite is flanked by biotite schist for a width of 0.3 to 0.76 m. Massive (2.5 cm wide) bands and disseminated uraninite crystals up to 3.15 cm in diameter occur in the biotite schist. A 45° inclined shaft was sunk to a depth of 37 m along the contact between biotite schist and pegmatite.

At Drope Lake (SMDI No. 805), a large flat-lying pegmatite sill intrudes biotitic metasediments. The pegmatite trends northeast, varies from 25 to 76 m in thickness and contains a band of anomalous radioactivity exposed over a surface width of 122 m and a length of 305 m. Mineralization associated with the more highly fractured sections of the pegmatite consists of becquerelite, liebigite, uranophane and uraninite. Indicated reserves in six zones are 8 568 000 tonnes averaging 0.71 percent U to a depth of 50 m. A pilot mill was set up and, in 1954, 59 tonnes of ore were milled; production averaged only 0.13 percent U and the mill was closed.

At the Milner Lake showing (SMDI No. 847) located in the MacLennan Lake Tectonic Zone, secondary uranium minerals are accompanied by fluorite. The fluorine could be an indicator of important Be/rare earth, Sn and Li mineralization; this should be investigated further. Exploration work could be directed to the northeast and southwest, along the MacLennan Lake Tectonic Zone. The secondary uranium mineralization (mainly uranophane and autunite) occurs at the contact between granitic gneiss and pegmatite over a 15 by 45 m area. One end of the

trench exposed a heavy concentration of the uranium minerals in association with veinlets of fluorite.

It is possible that the uranium was deposited syngenetically with biotitic metasediments and later remobilized by anatectic processes. Future uranium exploration should therefore be focussed along pegmatite/supracrustal contacts in the same stratigraphic position as known occurrences.

10) Miscellaneous Mineralization

Miscellaneous mineralization includes:

1) talc (soapstone) on several of the Pipestone Islands on eastern Wapawekka Lake (SMDI Nos. 687 and 688) and at Pipestone Bay, Lac la Ronge (SMDI Nos. 795 and 796);
2) asbestos in the Hunt Lake area (SMDI No. 790); small veinlets occur in small ultrabasic bodies;
3) allanite in the southern margin of the Lacey Lake Granite (SMDI No. 686);
4) microcline-perthite feldspar at Lee (Jahala) Lake (SMDI No. 719) (226, 92, 358);
5) lignitic coal seams (SMDI No. 671) and high purity silica sands (SMDI No. 673) in Cretaceous quartz-kaolinite sandstones of the Mannville Group south of Wapawekka Lake (325); and
6) manganese-rich nodules in Upper Cretaceous shales from the top of the Wapawekka Hills (SMDI No. 682).

References

(1) Adera Mining Ltd. and Magnet Explorations Ltd. (1967): Assessment File 73P11-0018.

(2) Andrews, P.B. and McDonald, H. (1956): Assessment File 73P15-0005.

(3) Anglo Barrington Mines Ltd. (1956-1958): Assessment File 73P09-0003.

(4) Anglo Barrington Mines Ltd. (1956-1958): Assessment File 73P16-0009.

(5) Anglo-Rouyn Mines Ltd. (1965): Assessment File 73P07-0094.

(6) _____ (1965): Assessment File 73P07-0101.

(7) _____ (1952-1955): Assessment File 73P07-0046.

(8) _____ (1965): Assessment File 73P07-0094.

(9) _____ (1964-1965): Assessment File 73P07-0099.

(10) _____ (1970): Assessment File 73P07-0109.

(11) Antoniuk, Peter (1970): Assessment File 73P07-0116.

(12) _____ (1974): Assessment File 73P07-0132.

(13) _____ (1974): Assessment File 73P07-0134.

(14) _____ (1976): Assessment File 73P07-0145.

(15) _____ (1977): Assessment File 73P07-0149.

(16) Athabasca Columbia Mining Ltd. (1973): Assessment File 73P16-0033.

(17) Augustus Exploration Ltd. (1965): Assessment File 73P07-0097.

(18) Beck, L.S. (1959): Mineral occurrences in the Precambrian of northern Saskatchewan; Sask. Dep. Miner. Resour., Rep. 36, 134p.

(19) Beveridge, E. (1960): Assessment File 73P16-0031.

(20) Bison Petroleum and Minerals Ltd. (1964): Assessment File 73P07-0085.

(21) Blakney, B.O. (1956-1965): Assessment File 73P03-0008.

(22) _____ (1967-1970): Assessment File 73P03-0017.

(23) _____ (1968-1970): Assessment File 73P03-0018.

(24) Bruce, E.L. (1930): Assessment File 73P08-0015.

(25) Budding, A.J. (1955): The geology of the Settee Lake area (east half) Saskatchewan; Sask. Dep. Miner. Resour., Rep. 17, 19p.

(26) Canadian Bonanza Petroleums Ltd. (1969-1971): Assessment File 73P05-0010.

(27) _____ (1971): Assessment File 73P05-0012.

(28) _____ (1969-1971): Assessment File 73P05-0013.

(29) _____ and Silver Chief Minerals Ltd. (1970): Assessment File 73P10-0064.

(30) Canadian Delhi Oil et al. (1969-1970): Assessment File 73P13-0010.

(31) Canadian Mines Handbook (1970-1971): p338.

(32) _____ (1976-1977): p306.

(33) Canadian Mining Journal, July, 1983: Gold grades "economic" at Star Lake-Waddy Lake prospect; p.12.

(34) Canadian Nickel Co. Ltd. (1969-1970): Assessment File 73P05-0006.

(35) _____ (1969): Assessment File 73P06-0058.

(36) _____ (1968): Assessment File 73P06-0057.

(37) _____ (1956): Assessment File 73P07-0001.

(38) _____ (1954): Assessment File 73P14-0001.

(39) _____ (1958): Assessment File 73P14-0002.

(40) _____ (1954): Assessment File 73P14-0007.

(41) Canadian Pacific Oil and Gas, and Gunnex Ltd. (1968): Assessment File 73P16-0019.

(42) Cartier Quebec Explorations Ltd. (1960): Assessment File 73P07-0028.

(43) _____ (1960): Assessment File 73P07-0032.

(44) Cates, J. et al. (1951): Assessment File 73P06-0004.

(45) Centennial Mines Ltd. (1968): Assessment File 73P07-0067.

(46) Churchill Valley Mineral Explorations Ltd. (1939-1941): Assessment File 73P07-0040.

(47) _____ (1939-1940): Assessment File 73P07-0058.

(48) Claude Resources Inc. (Feb. 10, 1984): News Release.

(49) Cluff, G.R. (1976): Assessment File 73P07-0147.

(50) Columbian Northland Exploration Ltd. (1971): Assessment File 73P07-0125.

(51) Cominco (1945): Assessment File 73P06-0003.

(52) _____ (1940): Assessment File 73P07-0006.

(53) _____ (1945-1948): Assessment File 73P07-0013.

(54) _____ (1958): Assessment File 73P10-0001.

(55) _____ (1968): Assessment File 73P16-0020.

(56) _____ (1962-1963): Assessment File 73P16-0023.

(57) Consolidated Mining and Smelting Co. Ltd. (1945-47): Assessment File 73P16-0002 (74A01-0012).

(58) _____ (1947): Assessment File 73P16-0003.

(59) Contact Gold Mines Ltd. (1960-1963): Assessment File 73P07-0009.

(60) Continental McKinney Mines Ltd. (1969): Assessment File 73P03-0010.

(61) _____ (1968): Assessment File 73P06-0030.

(62) _____ (1969): Assessment File 73P06-0053.

(63) Coombe, W. (1975): La Ronge-Wollaston Base Metals Project; *in* Summary of Investigations 1975, Saskatchewan Geological Survey; Sask. Miner. Resour., p101.

(64) _____ (1984): Gold in Saskatchewan; Sask. Energy Mines, Open File Rep. 84-1, 134p.

(65) Copeland, J.G. (1953): Assessment File 73P01-0008.

(66) Cougar Development Corporation Ltd. (1961-1964): Assessment File 73P07-0095.

(67) _____ (1966): Assessment File 73P07-0075.

(68) _____ (1966-1968): Assessment File 73P07-0092.

(69) _____ (1966): Assessment File 73P10-0029.

(70) _____ (1970): Assessment File 73P10-0063.

(71) Cree Mining Corp. Ltd. (1957): Assessment File 73P15-0003.

(72) Don Fisher Syndicate (1965): Assessment File 73P10-0046.

(73) _____ (1965): Assessment File 73P10-0047.

(74) _____ (1966): Assessment File 73P16-0026.

(75) _____ (1965): Assessment File 73P10-0048.

(76) _____ (1966): Assessment File 74A-0006.

(77) _____ (1966): Assessment File 73P13-0009.

(78) _____ (1965): Assessment File 73P14-0009.

(79) Davis, E.N. (1939-1940): Assessment File 73P07-0056.

(80) Drope Lake Explorations Ltd. (1967): Assessment File 73P08-0033.

(81) Ducommun, G. (1965): Assessment File 73P01-0019.

(82) _____ (1966): Assessment File 73P02-0006.

(83) Dunlop, W.B. (1968): Assessment File 73P03-0011.

(84) Dunlop Mining Co. Ltd. (1966-1967): Assessment File 73P06-0036.

(85) _____ (1970): Assessment File 73P06-0062.

(86) Dunlop Mining Co. Ltd. and Studer Mines Ltd. (1970-1972): Assessment File 73P06-0071.

(87) Everest Mining and Exploration Ltd. (1967-1968): Assessment File 73P10-0049.

(88) Fano Mining and Exploration Inc. (1956): Assessment File 73P06-0006.

(89) Findlay Grubstake (1970): Assessment File 73P10-0067.

(90) Five Star Petroleum and Mines Ltd. (1967-1968): Assessment File 73P10-0044.

(91) Forbes Lake Mining Corp. Ltd. (1956): Assessment File 73P15-0001.

(92) Ford, R.B. (1955): Nunn Lake uraninite-bearing pegmatite; Econ. Geol., v50, p196-205.

(93) Forsythe, L. H. (1968): The geology of the Stanley area (west half) (McKay Lake area), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 115, pt1, 58p.

(94) _____ (1969): 73-P-5-W: Morning Lake area (west half); *in* Summary Report of Geological Surveys Conducted in the Precambrian Area of Saskatchewan, 1969; Sask. Dep. Miner. Resour., p3-5.

(95) _____ (1970): 73-P-5-E: Morning Lake area (east half); *in* Summary Report of Geological Investigations Conducted in the Precambrian Area of Saskatchewan, 1970; Sask. Dep. Miner. Resour., p2-5.

(96) _____ (1971): The geology of the Nemeiben Lake area (east half) and the geology of mineral deposits in the Nemeiben Lake-Stanley areas, Saskatchewan; Sask. Dep. Miner. Resour., Rep. 115, pt2, 178p.

(97) _____ (1971): The geology of the Clam Lake area (west half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 136, 15p.

(98) _____ (1972): Anglo-Rouyn copper mine, Ore Bay, Lac la Ronge; Geol. Soc. Am. Bull., v83, no11, p3405-3413.

(99) _____ (1972): The geology of the Clam Lake area (east half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 138, 25p.

(100) _____ (1974): La Ronge (east) and Hunter Bay (west) area: geological survey of 73P-2 (W) and 73P-3 (E); *in* Summary Report of Field Investigations by the Saskatchewan Geological Survey, 1974; Sask. Dep. Miner. Resour., p3-6.

(101) _____ (1975): Hunter Bay (east) and parts of the Cartier Lake area: geological mapping of 73P-2 (E), part 73P-1 (W) and part 73P-1 (E); *in* Summary of Investigations 1975, by the Saskatchewan Geological Survey; Sask. Dep. Miner. Resour., p3-5.

(102) _____ (1976): The geology of the Nemeiben Lake area (west half) and the La Ronge area (west half); Sask. Dep. Miner. Resour., Rep. 152, 18p.

(103) _____ (1976): Cartier Lake area: geological mapping of 73P-1; *in* Summary of Investigations 1976, by the Saskatchewan Geological Survey; Sask. Dep. Miner. Resour., p5-7.

(104) Fort Reliance Minerals Ltd. (1965): Assessment File 73P07-0120.

(105) Friesen, E. et al. (1956-1957): Assessment File 73P10-0004.

(106) Glenn Uranium Mines Ltd. (1955-57): Assessment File 73P08-0014.

(107) Golden Rule Resources Progress Reports: Oct. 5, 1987; Nov. 3, 1987; March 16, 1988; Golden Rule Resources Ltd. Annual Report 1987.

(108) Goldsil Resources Ltd./Mahogany Minerals Resources, Progress Reports: Aug. 4, 1987; Sept. 28, 1987; Mar. 15, 1988; Oct. 20, 1987; Aug. 20, 1987; Aug. 5, 1987.

(109) Gossen, A.J. (1962-65): Assessment File 73P07-0007.

(110) Government of Saskatchewan (DNS) (1973-1974): Assessment File 73P03-0021.

(111) _____ (1973): Assessment File 73P06-0041.

(112) _____ (1973-1975): Assessment File 73P06-0077.

(113) _____ (1973-1974): Assessment File 73P06-0078.

(114) _____ (1974): Assessment File 73P07-0141.

(115) _____ (1974-1975): Assessment File 73P07-0137.

(116) _____ (1975): Assessment File 73P07-0142.

(117) _____ and Waden Bay Holdings Ltd. (1975): Assessment File 73P07-0136.

(118) Great Plains Development Co. of Canada Ltd. (1965): Assessment File 73I15-0001.

(119) _____ (1965): Assessment File 73I15-0003.

(120) _____ (1970): Assessment File 73I15-0005.

(121) _____ (1965): Assessment File 73P06-0025.

(122) _____ (1968): Assessment File 73P06-0024.

(123) _____ (1967): Assessment File 73P06-0021.

(124) _____ (1969): Assessment File 73P06-0067.

(125) _____ (1969): Assessment File 73P06-0046.

(126) _____ (1969): Assessment File 73P06-0044.

(127) _____ (1968): Assessment File 73P06-0022.

(128) _____ (1969): Assessment File 73P07-0082.

(129) _____ (1968): Assessment File 73P07-0063.

(130) _____ (1965): Assessment File 73P07-0064.

(131) _____ (1966): Assessment File 73P07-0065.

(132) _____ (1966): Assessment File 73P07-0023.

(133) _____ (1968): Assessment File 73P07-0062.

(134) _____ (1967): Assessment File 73P09-0007.

(135) _____ (1967): Assessment File 73P10-0016.

(136) _____ (1965): Assessment File 73P10-0018.

(137) _____ (1968): Assessment File 73P10-0021.

(138) _____ (1965-1968): Assessment File 73P10-0017.

(139) _____ (1968): Assessment File 73P10-0020.

(140) _____ (1965): Assessment File 73P10-0035.

(141) _____ (1967-1968): Assessment File 73P15-0010.

(142) _____ (1968): Assessment File 73P15-0011.

(143) _____ (1966): Assessment File 73P15-0012.

(144) _____ (1967): Assessment File 73P16-0012.

(145) _____ (1965): Assessment File 73P16-0018.

(146) _____ (1968): Assessment File 73P16-0013.

(147) Green Bay Mining and Exploration Ltd. (1957): Assessment File 73P07-0047.

(148) Guaranty Trust Co. of Canada Ltd. (1968-1969): Assessment File 73P15-0034.

(149) Gulch Mines Ltd. (1965): Assessment File 73P07-0076.

(150) Hardrock Resources Ltd. (1960): Assessment File 73I16-0002.

(151) _____ (1960): Assessment File 73I16-0006.

(152) Hird, M.E. (1963-1965): Assessment File 73P16-0007.

(153) _____ (1970): Assessment File 73P16-0030.

(154) Hird, M.E. and Hird, E.H. (1972): Assessment File 73P16-0032.

(155) Hird, E. (1981): Assessment File 73P16-0044.

(156) _____ (1982): Assessment File 73P16-0045.

(157) _____ (1983): Assessment File 73P16-0047.

(158) _____ (1983): Assessment File 73P16-0048.

(159) _____ and M. Hird (1982): Assessment File 73P16-0046.

(160) Hixon Uranium Ltd. (1953-1955): Assessment File 73P07-0026.

(161) Home Mining Developments Ltd. (1970): Assessment File 73P16-0029.

(162) Hooton, D.R. (1956): Assessment File 73P08-0016.

(163) Hudson Bay Exploration and Development Co. Ltd. (1972, 1974): Assessment File 73I16-0019.

(164) _____ (1974): Assessment File 73I16-0020.

(165) _____ (1969): Assessment File 74A04-0002.

(166) _____ (1970): Assessment File 74A04-0005.

(167) Hudson Bay Mining and Smelting Co. Ltd. (1946-1947): Assessment File 73P07-0022.

(168) _____ (1946-1947): Assessment File 73P07-0027.

(169) _____ (1946): Assessment File 73P07-0018.

(170) Husky Oil Operations Ltd. (1971-1972): Assessment File 73P06-0070.

(171) _____ (1971): Assessment File 73P10-0069.

(172) _____ (1972): Assessment File 73P10-0070.

(173) _____ (1972): Assessment File 73P10-0071.

(174) Inco (1954): Assessment File 73P06-0011.

(175) _____ (1959): Assessment File 73P13-0003.

(176) _____ (1959): Assessment File 73P14-0014.

(177) _____ (1959): Assessment File 73P14-0003.

(178) International Minerals and Chemical Corp. (Canada) Ltd. (1964): Assessment File 73P07-0072.

(179) _____ (1965): Assessment File 73P07-0073.

(180) _____ (1967): Assessment File 73P07-0071.

(181) Inter-Tech Development and Resources Ltd. (1969): Assessment File 73P08-0026.

(182) _____ (1967-1969): Assessment File 73P15-0036.

(183) Iroquois Mines Ltd. (1969-1970): Assessment File 73P15-0032.

(184) _____ (1969-1970): Assessment File 73P15-0026.

(185) Isbister, J. et al. (1958): Assessment File 73P11-0004.

(186) Jahala Lake Uranium Mines Ltd. (1953): Assessment File 73P01-0009.

(187) _____ (1957): Assessment File 73P07-0031.

(188) Jersey Consolidated Mines Ltd. (1968): Assessment File 73P10-0024.

(189) Kaiser Development Corp. Ltd. (1957): Assessment File 73P07-0017.

(190) Kaiser Mines Ltd. (1966): Assessment File 73P10-0028.

(191) Kelly, L.G. (1965): Assessment File 73P07-0098.

(192) _____ (1967): Assessment File 73P10-0026.

(193) _____ (1965): Assessment File 73P10-0045.

(194) Kelkeno Copper Corp. Ltd. (1956): Assessment File 73P15-0002.

(195) Kerr Addison Gold Mines Ltd. (1966-1967): Assessment File 73P05-0003.

(196) _____ (1961): Assessment File 73P07-0003.

(197) _____ (1965-1966): Assessment File 73P07-0029.

(198) Klein, J.W. (1965-1967): Assessment File 73P10-0007.

(199) Knox Saskatchewan Syndicate (1958): Assessment File 73P09-0001.

(200) Knox, W.T. (1969-1970): Assessment File 73P16-0028.

(201) Laronex Copper Mines Ltd. (1967): Assessment File 73P08-0031.

(202) Laronex Mining and Exploration Co. Ltd. (1961): Assessment File 73P08-0028.

(203) _____ (1963): Assessment File 73P08-0029.

(204) _____ (1966): Assessment File 73P08-0030.

(205) La Ronge Mineral Syndicate (1967-1968): Assessment File 73P06-0037.

(206) _____ (1968): Assessment File 73I16-0013.

(207) La Ronge Mining Ltd. (1970): Assessment File 73P07-0108.

(208) _____ (1969): Assessment File 73P07-0080.

(209) _____ (1969): Assessment File 73P07-0081.

(210) La Ronge Uranium Mines Ltd. (1949-1954): Assessment File 73P08-0004.

(211) Lee, P.A. and Johnson, L.E. (1958): Assessment File 73P07-0030.

(212) Lee, S.E. (1964-1967): Assessment File 73P07-0074.

(213) _____ (1965): Assessment File 73P15-0018.

(214) Lewry, J.F. (1984): Bedrock compilation, Lac la Ronge and Wapawekka areas (NTS 73P/73I); *in* Summary of Investigations 1984, Saskatchewan Geological Survey; Sask. Energy Mines, Misc. Rep. 84-4, p34-41.

(215) Lewry, J.F. and Slimmon, W.L. (1985): Compilation bedrock geology, Lac la Ronge, NTS Area 73P/73I; Sask. Energy Mines, Rep. 225 (1:250 000 scale map with marginal notes).

(216) Lionsgate Mines Ltd. (1965): Assessment File 73P06-0027.

(217) Little Long Lac Mines Ltd. (1954): Assessment File 73P06-0066.

(218) Loranda Uranium Mines Ltd. (1955): Assessment File 73P10-0006.

(219) Lusk, L.A. (1964): Assessment File 73P06-0038.

(220) _____ (1965): Assessment File 73P06-0035.

(221) _____ (1966): Assessment File 73P06-0034.

(222) _____ (1965): Assessment File 73I16-0014.

(223) Madsen Red Lake Gold Mines (1956): Assessment File 73P06-0007.

(224) Magma Mines Ltd. (1956-1957): Assessment File 73P07-0015.

(225) Mawdsley, J.B. (1940): The Sulphide Lake gold-bearing belt, Lac la Ronge district, Saskatchewan; Can. Min. Metall. Bull., v43, no339, p287-298.

(226) _____ (1954): Radioactive, pronouncedly differentiated pegmatite sill, Lac la Ronge district, northern Saskatchewan; Econ. Geol., v49, no6, p618-623.

(227) _____ and Grout, F.F. (1951): The geology of the Stanley area, Saskatchewan; Sask. Dep. Miner. Resour., Rep. 4, 31p.

(228) McArthur, L.N. (1958): Assessment File 73P03-0002.

(229) McArthur, L. (1960): Assessment File 73I16-0009.

(230) _____ (1960): Assessment File 73P02-0001.

(231) McArthur, L. and Hooton, D.R. (1952): Assessment File 73P07-0059.

(232) McArthur, L. and Nelson, O. (1952): Assessment File 73P08-0005.

(233) McIntyre Porcupine Mines Ltd. (1963): Assessment File 73P11-0021.

(234) _____ (1965): Assessment File 73P11-0001.

(235) _____ (1965): Assessment File 73P11-0022.

(236) Mining and Engineering, Feb. 25, 1984: Star Lake gold deposit conceptual study.

(237) Mining Journal, Jan. 18, 1985: Star Lake decision awaited, p42.

(238) McLeod, W. (1962): Assessment File 73P11-0020.

(239) Money, P.L. (1965): The geology of the area around Needle Falls, Churchill River, Saskatchewan; Sask. Dep. Miner. Resour., Rep. 88, 70p.

(240) Montego Mines Ltd. (1968): Assessment File 73P10-0025.

(241) Moose Point Syndicate (1966): Assessment File 73P06-0031.

(242) _____ (1967): Assessment File 73P06-0042.

(243) Morris, A. (1960): The geology of the Trout Lake area (east half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 42, 22p.

(244) _____ (1961): The geology of the Settee Lake area (west half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 55, 27p.

(245) _____ (1962): The geology of the Nistowiak Lake area (east half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 70, p21-22.

(246) _____ (1963): The geology of the Trout Lake area (west half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 77, 23p.

(247) _____ (1965): The geology of the Black Bear Island Lake area (east half), Saskatchewan; Sask. Dep. Miner. Resour., Rep. 86, 24p.

(248) MSZ Resources Ltd. (1980): Assessment File 73P-16-0035.

(249) Murphy, W.L. (1986): Geology and exploration history of the gold mineralization in the Star Lake area, Saskatchewan; *in* Clark, L.A. (ed.), Gold in the Western Shield; Can. Inst. Min. Metall., Spec. Vol. 38, p212-220.

(250) National Nickel Ltd. (Merritt Copper Co. Ltd.) (1967-1969): Assessment File 73P06-0054.

(251) _____ (1968): Assessment File 73P06-0047.

(252) _____ (1969): Assessment File 73P06-0051.

(253) National Nickel-Dunlop Mining Co. Ltd. (1968): Assessment File 73P06-0050.

(254) Nelson, O., Bell, L. and McArthur L. (1958-1960): Assessment File 73P6-0010.

(255) Nelson, S.G. (1972): Assessment File 73P14-0019.

(256) Nemanishen, V. (1962): Assessment File 73P07-0084.

(257) Nemanishen, W. (1964): Assessment File 73P07-0086.

(258) _____ (1966): Assessment File 73P07-0087.

(259) _____ (1967-1968): Assessment File 73P07-0088.

(260) _____ (1967-1968): Assessment File 73P07-0079.

(261) _____ (1968): Assessment File 73P07-0083.

(262) _____ (1968-1969): Assessment File 73P07-0078.

(263) _____ (1969-1970): Assessment File 73P07-0112.

(264) _____ (1969-1970): Assessment File 73P07-0114.

(265) _____ (1969): Assessment File 73P07-0111.

(266) _____ (1971-1973): Assessment File 73P07-0128.

(267) _____ (1974-1975): Assessment File 73P07-0140.

(268) _____ (1974): Assessment File 73P07-0130.

(269) _____ (1974-1975): Assessment File 73P07-0138.

(270) _____ (1976): Assessment File 73P07-0144.

(271) _____ (1976): Assessment File 73P07-0146.

(272) Noranda Exploration Co. Ltd. (1968-1969): Assessment File 73P06-0043.

(273) _____ (1965): Assessment File 73P08-0036.

(274) _____ (1966): Assessment File 73P08-0007.

(275) _____ (1966): Assessment File 73P08-0008.

(276) _____ (1966): Assessment File 73P08-0009.

(277) _____ (1966): Assessment File 73P08-0010.

(278) _____ (1966): Assessment File 73P10-0055.

(279) _____ (1966-1967): Assessment File 73P08-0011.

(280) _____ (1966-1967): Assessment File 73P08-0012.

(281) _____ (1967): Assessment File 73P09-0006.

(282) _____ (1967): Assessment File 73P08-0034.

(283) _____ (1967): Assessment File 73P10-0036.

(284) _____ (1967): Assessment File 73P10-0037.

(285) _____ (1967): Assessment File 73P10-0038.

(286) _____ (1967-1968): Assessment File 73P11-0012.

(287) _____ (1967-1968): Assessment File 73P11-0014.

(288) _____ (1967-1968): Assessment File 73P10-0039.

(289) _____ (1967-1968): Assessment File 73P10-0054.

(290) _____ (1967-1968): Assessment File 73P15-0016.

(291) _____ (1968): Assessment File 73P15-0027.

(292) _____ (1968): Assessment File 73P15-0028.

(293) _____ (1968): Assessment File 73P15-0029.

(294) _____ (1969): Assessment File 73P15-0033.

(295) Norpoint Explorations Ltd. (1966): Assessment File 73P16-0017.

(296) North Devon Mines Ltd. (1965): Assessment File 73P02-0002.

(297) Northern Copper Ltd. (1968): Assessment File 73P08-0032.

(298) _____ (1970): Assessment File 73P08-0037.

(299) Northern Miner, Sept. 22, 1983: Star Lake drilling; p17.

(300) _____, Feb. 23, 1984: SMDC-Starrex drill results encouraging at Star Lake, Sask.; v69, no51, p1.

(301) _____, Mar. 5, 1984: Starrex-SMDC results; v69, no53, p14.

(302) _____, Mar. 24, 1984: Star Lake ore reserves; v70, no11, p23.

(303) _____, July 12, 1984: Underground development planned at Star Lake, p14.

(304) _____, Jan. 3, 1985: Decision at Star Lake expected by month-end; v70, no43, p1.

(305) _____, Sept. 21, 1987: Spectacular gold shows made by SMDC, partners; v73, no28.

(306) _____, Oct. 5, 1987: Golden Rule et al discovery; v73, no37, p16.

(307) _____, Nov. 16, 1987: Golden Rule gets interest in La Ronge gold prospect; v73, no36, pB21.

(308) _____, Nov. 23, 1987: Mahogany assays; v73, no37, p14.

(309) _____, Nov. 23, 1987: SMDC has results from Fork Lakes; v73, no37, p29.

(310) _____, Dec. 14, 1987: Three Shoots identified at Fork Lakes; v73, no40, p3.

(311) _____, Jan. 11, 1988: Looking ahead to a good '88; v73, no44, p14.

(312) Olsen, C. (1958): Assessment File 73P14-0004.

(313) _____ (1958): Assessment File 73P14-0005.

(314) Padgham, W.A. (1960): The geology of the Otter Lake area (west half); Sask. Dep. Miner. Resour., Rep. 41, 34p.

(315) _____ (1963): The geology of the Otter Lake area (east half); Sask. Dep. Miner. Resour., Rep. 56, 51p.

(316) _____ (1966): The geology of the Guncoat Bay area, Saskatchewan; Sask. Dep. Miner. Resour., Rep. 78, 143p.

(317) _____ (1966): The geology of the Wapawekka Narrows area, Saskatchewan; Sask. Dep. Miner. Resour., Rep. 87, 113p.

(318) _____ (1967): The geology of the Wapawekka Lake area (north half); Sask. Dep. Miner. Resour., Rep. 103, 57p.

(319) Partridge, E.F. (1961): Assessment File 73P16-0001.

(320) _____ (1961): Assessment File 73P16-0004.

(321) _____ and Riocanex (1961-1962): Assessment File 73P16-0005.

(322) Paulger, V.L. (1968): Assessment File 73P11-0029.

(323) Pearson, W.J. (1957): An investigation into the geological significance of some magnetic anomalies in the Lac la Ronge area of northern Saskatchewan; Sask. Dep. Miner. Resour., Rep. 29, p30-43.

(324) _____ and Froese, E. (1959): The geology of the Forbes Lake area, Saskatchewan; Sask. Dep. Min. Resour., Rep. 34, 28p.

(325) _____ (1961): Silica sand and coal occurrences on Wapawekka Lake; Sask. Dep. Miner. Resour., unpubl. rep.

(326) Pioneer Contractors Ltd., Glenn Uranium Mines Ltd. et al. (1956): Assessment File 73P08-0024.

(327) Porteus, D.L. (1968): Assessment File 73I16-0017.

(328) Pre-Cam Exploration and Development Ltd. (1956-1957): Assessment File 73P15-0004.

(329) _____ (1956-1957): Assessment File 73P15-0006.

(330) _____ (1956-1957): Assessment File 73P16-0006.

(331) _____ (1957): Assessment File 73P10-0003.

(332) _____ (1958-1961): Assessment File 73P11-0007.

(333) Preview Mines Ltd. (1938-1941): Assessment File 73P07-0010.

(334) Provincial Mining and Development Co. Ltd. (1966): Assessment File 73P10-0030.

(335) _____ (1967): Assessment File 73P10-0031.

(336) Rajah Mines and Minerals Ltd. (1970): Assessment File 73P10-0072.

(337) Randall, J.A. (1976): Assessment File 73P07-0135.

(338) Ray, G.E. (1974): Foster Lake (south)-La Ronge (nw) area: reconnaissance geological survey; *in* Summary Report of Field Investigations by the Saskatchewan Geological Survey, 1974; Sask. Dep. Miner. Resour., p14-19.

(339) Rede Exploration Syndicate (1966-1969): Assessment File 73P07-0042.

(340) Rede Explorations (1970): Assessment File 73P07-0113.

(341) Rees, C.J. (1982): Metamorphism in the Canadian Shield of northern Saskatchewan; Sask. Miner. Resour., Open File Rep. 82-2, 136p.

(342) Regcourt Gold Mines Ltd. (1956): Assessment File 73P08-0001.

(343) Regina Leader Post: (July 25, 1985): Star Lake gold mine gets go-ahead.

(344) _____ (Jan. 27, 1987): A shining start.

(345) Richards, B.R. (1957): Assessment File 73P15-0008.

(346) _____ (1957): Assessment File 73P16-0010.

(347) _____ (1957-1959): Assessment File 73P10-0002.

(348) Riocanex (1963-64): Assessment File 73P07-0093.

(349) _____ (1967): Assessment File 73P06-0039.

(350) RioCanadian Exploration Ltd. (1957): Assessment File 73P10-0015.

(351) Rio Tinto Canadian Exploration Ltd. (1965): Assessment File 73P07-0068.

(352) _____ (1965): Assessment File 73P10-0068.

(353) _____ (1967): Assessment File 73P06-0032.

(354) _____ (1967): Assessment File 73P10-0023.

(355) _____ (1967): Assessment File 73P15-0021.

(356) Ronson Mines Ltd. (1966-1967): Assessment File 73P06-0029.

(357) Ryhorchuk, W.A. (1978-1979): Assessment File 73P16-0034.

(358) Sabina, A.P. (1972): Rocks and minerals for the collector: La Ronge-Creighton, Saskatchewan, Flin Flon-Thompson, Manitoba; Geol. Surv. Can., Pap. 71-27, p14-16.

(359) Sask. Mining Development Corp. (1975): Assessment File 73P06-0080.

(360) _____ (1975): Assessment File 73P06-0084.

(361) _____ (1975): Assessment File 73P07-0139.

(362) _____ (1975): Assessment File 73P07-0143.

(363) _____ (1981): Assessment File 73P10-0068.

(364) _____ (1987): SMDC Annual Report.

(365) Sask. Mining and Development Corp.: News release, Feb. 20, 1984.

(366) _____ News release, July 16, 1984.

(367) _____ News release, Dec. 21, 1984.

(368) _____ News release, Sept. 15, 1987.

(369) _____ News release, Feb. 29, 1988. Progress report.

(370) _____ News release, Apr. 26, 1988. $6 million underground exploration program announced for Fork Lakes..

(371) Sask. Business Bulletin (Aug. 1, 1985): Star Lake mine and mill to go ahead.

(372) Saskatchewan Environment (Sept. 1985): Sask. Environment comments on the proposed gold mine and mill at Star Lake, Sask., as proposed by SMDC and Starrex Mining Corp. Ltd.

(373) Scurry Rainbow Oil Ltd. (1965, 1967): Assessment File 73P15-0023.

(374) _____ (1966): Assessment File 73P16-0021.

(375) _____ (1967): Assessment File 73P10-0033.

(376) _____ (1967): Assessment File 73P10-0034.

(377) _____ (1967): Assessment File 73P10-0043.

(378) _____ (1968): Assessment File 73P15-0037.

(379) _____ (1968-1969): Assessment File 73P15-0031.

(380) _____ (1970): Assessment File 73P15-0039.

(381) _____ (1971): Assessment File 73P15-0038.

(382) _____ (1971): Assessment File 73P15-0041.

(383) _____ (1973): Assessment File 73P15-0042.

(384) _____ (1973): Assessment File 73P15-0043.

(385) _____ (1974): Assessment File 73P15-0044.

(386) Selco Exploration Co. Ltd. (1966): Assessment File 73I16-0005.

(387) _____ (1966): Assessment File 73I16-0011.

(388) _____ (1966): Assessment File 73I16-0012.

(389) Sherritt Gordon Mines Ltd. (1968): Assessment File 73P07-0103.

(390) Shupe, W. (1977): Assessment File 73P01-0021.

(391) _____ and McArthur, L.N. (1958-1960): Assessment File 73P07-0012.

(392) Sibbald, T.I.I. (1986): Bedrock geological mapping, Sulphide Lake area; *in* Summary of Investigations 1986, Saskatchewan Energy Mines, Misc. Rep. 86-4, p63-64.

(393) Simonson, L. and Lindskog, A. (1957): Assessment File 73P07-0016.

(394) Skopos, M.J. and Lawton, M.D. (1968): Method of calculating ore reserves at the Anglo-Rouyn property, Saskatchewan; *in* Ore Reserve Estimation and Grade Control; Can. Inst. Min. Metall., Spec. Vol. 9, p193-196.

(395) Star Lake (Jan. 28, 1987): News release, Star Lake joint venture pours gold.

(396) Starrex Mining Corporation (1983): Interim Shareholder Report for the 6 months ended June 30, 1983.

(397) St. Paul Syndicate Ltd. (1954, 1956): Assessment File 73P07-0014.

(398) Studer, A. (1934): Assessment File 73P07-0124.

(399) _____ (1940, 1949): Assessment File 73P07-0045.

(400) _____ (1949): Assessment File 73P07-0121.

(401) _____ (1952): Assessment File 73P07-0008.

(402) _____ (1957-1958): Assessment File 73P10-0014.

(403) _____ (1961): Assessment File 73P10-0011.

(404) _____ (1964): Assessment File 73P10-0008.

(405) _____ (1967): Assessment File 73P07-0090.

(406) Studer, J.A. (1954-1955): Assessment File 73P07-0043.

(407) Studer, J.J. (1960-1966): Assessment File 73P07-0070.

(408) _____ (1974): Assessment File 73P07-0131.

(409) Studer, L.R. (1958-1959): Assessment File 73P07-0033.

(410) _____ (1958-1959): Assessment File 73P07-0050.

(411) Studer, R.E. (1968-1969): Assessment File 73P07-0069.

(412) Studer, V.J. (1977): Assessment File 73P07-0148.

(413) _____ (1973): Assessment File 73P07-0127.

(414) Studer Mines Ltd. (1957-1958, 1965): Assessment File 73P07-0021.

(415) _____ (1960-1965): Assessment File 73P07-0011

(416) _____ (1966): Assessment File 73P16-0011.

(417) _____ (1967): Assessment File 73P07-0096.

(418) _____ (1970): Assessment File 73P10-0066.

(419) _____ (1972): Assessment File 73P06-0068.

(420) _____ (1974): Assessment File 73P06-0072.

(421) _____ (1974): Assessment File 73P07-0133.

(422) Swanson, C.O. (1940): Assessment File 73P07-0057.

(423) Tapin Copper Mines Ltd. (1968-1969): Assessment File 73P03-0015.

(424) _____ (1969): Assessment File 73P10-0042.

(425) _____ (1969): Assessment File 73P10-0058.

(426) Thomas, D.J. (1984): Geological mapping, Star Lake area (part of NTS 73P-16 and 74A-1); *in* Summary of Investigations 1984, Saskatchewan Geological Survey; Sask. Energy Mines, Misc. Rep. 84-4, p21-31.

(427) _____ (1985): Bedrock Geological mapping, Roundish-Bervin Lakes area; Sask. Geol. Surv. Summary of Investigations 1985, p18-27.

(428) _____ (1986): Geology of an area around Star Lake; Sask. Energy Mines Open File 85-6, 83p.

(429) Thompson, H.L. and Thompson, G.F. (1957): Assessment File 73P07-0002.

(430) Thompson Bros. and Ventures Ltd. (1958): Assessment File 73P06-0008.

(431) Thomson, J. and Brady, P. (1957): Assessment File 73P06-0009.

(432) Trans-Canada Resources Ltd. and Canadian Delhi Oil Ltd. (1969): Assessment File 73016-0004.

(433) Uranium Valley Mines Ltd. (1970): Assessment File 73P06-0061.

(434) _____ (1970): Assessment File 73P06-0063.

(435) United Comstock Lode Mines Ltd. (1965): Assessment File 73P07-0005.

(436) Value Line Minerals Ltd. (1969): Assessment File 73P10-0059.

(437) Vancouver Stockwatch: Radcliffe Resources Ltd. news releases dating from Oct. 1, 1987 (Summary in SMDI file).

(438) Waden Bay Holdings Ltd. (1970): Assessment File 73P07-0123.

(439) _____ (1972): Assessment File 73P07-0126.

(440) _____ (1973): Assessment File 73P07-0129.

(441) Waden [sic] Bay Syndicate (1966-1967): Assessment File 73P07-0100.

(442) _____ (1968): Assessment File 73P07-0106.

(443) _____ (1969): Assessment File 73P07-0107.

(444) Wagner, P. and Friesen, P.S. (1957): Assessment File 73P10-0005.

(445) Westfield Minerals Ltd. (1959): Assessment File 73P07-0024.

(446) _____ and Fort Reliance Minerals Ltd. (1960, 1962, 1964, 1965): Assessment File 73P07-0020.

(447) Westpol Explorations Ltd. (1955-1956): Assessment File 73P03-0001.

(448) _____ (1956): Assessment File 73P07-0035.

(449) Wilson, W. (1967): Assessment File 73P06-0002.

(450) Wolhberg, H.B. (1958): Assessment File 73P07-0025

Mineral Occurrences

The abbreviations of mineral names used in this table are those standardized by the Geological Survey of Canada, with additions where necessary:

ala	allanite	cof	coffinite	lie	liebigite	ra	unidentified radioactive mineral
ang	anglesite	cv	covellite	lm	limonite	si	silica sand
asb	asbestos	cur	curite	mag	magnetite	sp	sphalerite
asp	arsenopyrite	ep	epidote	mal	malachite	stl	stilbite
aut	autunite	fld	feldspar	ma	marcasite	tk	talc-soapstone
az	azurite	fl	fluorite	mn	manganese	ur	uraninite
bec	becquerelite	gn	galena	mo	molybdenite	uph	uranophane
bo	bornite	goe	goethite	mz	monazite	vs	vesuvianite
car	carnotite	gf	graphite	na	natrolite	zr	zircon
cp	chalcopyrite	hem	hematite	pn	pentlandite	zo	zoisite
cr	chromite	kl	kaolin	po	pyrrhotite		
coa	coal	kas	kasolite	py	pyrite		

The abbreviation "045° /85° S" indicates a planar structure that is striking 045° and dipping 85° to the south.

Mineral Occurrences Identified in SMDI File

Wapawekka Map Sheet (NTS 73I):

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73I-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
671	C	Wapaw Bay	15	coa	on clay in quartz sands of Cretaceous Blairmore Formation	318
672	Cu (Fe, Pb)	west shore, Wapawekka Lake	15	cp, py, mag, ang	sericite schist, quartz eyes and stringers	118, 119, 120, 318
673	Si (C)	2.25 km northeast of Hart Point	15	si, kl, coa	high-grade silica sand, minor kaolin and coal seams	325
674	Au (Fe)	Wapa claim 13, eastern part of Wapawekka Lake	16	po; Au (assay)	quartz lens, hornblendic metavolcanics	206, 222, 229
675	Cu	Radar Bay, Wapawekka Lake	16	cp	hornblendic tuff with feldspar-chalcopyrite vein	317
676	Cu (Zn, Ni)	Ted claim group, near north shore of Wapawekka Lake	16	cp, sp	hornblendic augen gneiss in hornblende gneiss and argillite	317, 387, 388
677	Cu (Fe)	Jul claims 1 to 4, on island near south shore of Wapawekka Lake	16	cp, py, po	basalt and andesite	150, 317
678	Cu (Fe, Au, Zn)	BA claims 1 to 14, 6 km west of east end of Wapawekka Lake	16	cp, py, po, sp; Au (assay)	DDH 2 – hornblende gneiss, metadacite DDH 3 – sphalerite in narrow rhyolite band	317, 386
679	Cu (Fe)	Jan claims 1 to 8, 12 km west of east end of Wapawekka Lake	16	cp, py	sheared andesite	151, 317
680	Cu (Fe, Zn)	CBS 2790, Wapawekka Lake	16	cp, sp, py, po	biotite-hornblende felsic gneiss with calcitic vugs and biotite gneiss	163, 317
681	Cu (Fe, Zn, C)	CBS 2184, 6 km north-northeast of east end of Wapawekka Lake	16	cp, sp, gf, py	hornblende gneiss, chlorite-garnet schist	164, 317
682	Mn	upper reaches of Oskikebuk River	16	Mn-rich material	manganese-rich nodules in Cretaceous shale	317

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73I-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
683	Fe	near north shore, east end of Wapawekka Lake	16	po	hornblende-rich volcanics	317
684	Fe	1.1 km east of north end of Signal Bay, Wapawekka Lake	16	po	felsic gneiss (metatuff?) and/or metasandstone	317
685	Fe	0.3 km south of east end of Chuman Island, Wapawekka Lake	16	po	meta-agglomerate	317
686	Th	0.6 km north of Wapawekka Lake & 0.8 km south-east of south end of Lacey Lake	16	ala	allanite contributes to radioactivity of the Lacey Lake Granite	317, 327
687	Mg	Pipestone Islands, south shore of Wapawekka Lake.	16	tk	in retrogressive metavolcanics	317, 358
688	Mg	east of Wapawekka Narrows, on small island near north shore	16	tk	talc-tremolite rock, in retrogressive metavolcanics	317

Lac La Ronge Map Sheet (NTS 73P):

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
719		Lee claim 1, Lee (Jahala) Lake	01	fld	irregularly zoned pegmatite in contact with coarse mica schist	92, 186, 226, 390
720	U (Cu, Fe, Th)	Lee claim 1, Lee (Jahala) Lake	01	ur, cp, py, ala, mz, zr, zo, mag, goe, uph, cof, cur, kas	uraninite in biotite schist zone bordering pegmatite	65, 92, 103, 186, 358, 390
721	U (Fe, Cu, As)	east of south end of Lee (Jahala) Lake	01	ur, py, cp, asp, stl, na	E-W fracture zone in pegmatite within amphibolites	65, 103
722	Cu (Ni, Ag, Fe)	AB & Edna claims, Abrams Bay, Lac la Ronge	02	cp, pn, po; Ag (assay)	boudin of pyroxenite in felsic gneiss	82, 101, 230
723a	Fe	peninsula northeast of Hunter Bay area	02	py	feldspar-quartz porphyry	81, 101, 295
723b	Fe (Cu)	south shore of Hunter Narrows area	02	py, cp	quartz-biotite gneiss and schist	81, 101, 295
724	Fe (C)	east side of Lac la Ronge	02	py, po, mag, gf	felsic-mafelsic biotite gneiss	100
725	Cu (Fe, Mo, Ag, Ba, Ti, Ni)	Moose Point, Lac la Ronge	03	cp, py, mo; Ag (assay)	altered impure quartzite, biotite gneiss, serpentinite	21, 22, 23
726	Cu (Fe, Au, Ag, Ni, Zn)	Lac claims, English Bay, Lac la Ronge	03	cp, py; assay: Au, Ag	garnet-quartz-muscovite gneiss, hornblende-biotite gneisses and schists	60, 83, 110, 228

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
727	Fe	English Bay, Lac la Ronge	03	py	layered black calc-silicate rocks	102
728	U (Au, Cu, Fe)	Bela claims & CBS 1305, part of the north shore of the peninsula separating English Bay & Nut Bay	03	ur, py; assay: Au, Cu	quartz-biotite gneiss, migmatite, granitic gneiss with pegmatitic intrusions	18, 423, 447
729	Ni (Cu, Co, Fe, Zn)	WS claims 1 to 3 & CBS 34, Howard (Little Clam) Lake	06	pn, cp, py	hornblende gabbro with core of pyroxenite	26, 27, 28, 34, 94, 95, 99, 195
730	Fe (C)	Besnard Lake	05	py, po, mag, gf	migmatite, metasediments	97
731	Fe (Cu, Ni)	Clam–Head Lakes	05	py, mag	biotite gneiss	34
732	Cu (Au, Ag, Pb, Zn, Fe)	Anglo-Rouyn Mine	06	cp, po, py, mag, gn, sp, pn	meta-argillaceous sandstone and arkosite	18, 93, 96, 98, 125, 205, 219, 323, 358, 349, 389, 394
733a	Cu (Fe, Au, Ag, Zn, Pb, Ni, Mo)	Elizabeth Lake deposit	06	cp, po, mag, sp, gn	biotite gneisses with quartzite, arkose and calc-silicate gneisses	31, 32, 35, 102, 112, 272, 433, 434
733b	Cu (Fe)	Ron claims, 1.6 km south of SMDI 733a	06	cp, py	biotite gneiss	93, 96, 121
734	Cu (Fe, Zn)	CBS 510 & 511; south half of Eliason Island & part of Wadin Bay	06	cp, py, po, sp	shear (045° /85° SE) in basic volcanics	93, 96, 121
735	Cu (Fe, Mo, As)	Vic & M.P. claims, Williams Peninsula	06	cp, py, mo, asp, bo, native Cu	calcareous metasediments, interbedded volcanics and sediments	93, 96, 122, 223, 242, 241, 353
736	Cu (Fe, Ni)	Ore, Rich & Ron claims, covering east end of aeromagnetic anomaly on west end of Wadin Bay	06	cp, po, py	hornblende gneiss cored with gabbro	18, 36, 44, 51, 102, 123, 323, 430
737	Cu (Fe, Ni)	CBS 1527, Nemeiben Lake	06	cp, po, py	garnet-quartz-biotite gneiss	102, 124, 125, 126, 251
738	Cu (Fe, Au)	Wiz claims, Williams Peninsula	06	cp, po, py	quartz-biotite gneiss near contact with granodiorite	93, 96, 122, 221, 254
739	Cu (Fe)	Moose, AQ & Jane claims, Ore Bay	06	cp, py	meta-arkose, greywacke	220, 349
740	Cu (Fe)	northwest shore of North Bay, Nemeiben Lake	06	cp, py, po	amphibolite, hornblende gneiss and diorite	359, 360
741	Cu (Fe)	0.8 km south of Bague Bay, Nemeiben Lake	06	cp, py, po	narrow band of gabbro, with magnetite	113
742	Cu (Fe)	0.8 km east of north end of Fault Lake	06	cp, py, po	amphibolite with diorite	93, 96, 102
743	Cu (Fe, Au, Ag)	Hilda, Pond, Lar & Flo claims, Wadin Bay	06	cp, py, po; assay: Au, Ag	quartz-biotite schist, greywacke, granodiorite gneiss	93, 96, 216
744	Cu (C, Ni, Zn, Au, Ag, Fe, Pt)	west shore of Wadin Bay	06	cp, py, po; assay: Au, Ag, Pt	hornblende-biotite gneiss intruded by pyroxenite	93, 96, 127, 217, 431

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
745	Cu (C, Fe, Pb, Mo, Zn, Au)	west side of Wadin Bay	06	cp, native Cu, py, po, gf; Au (assay)	metasedimentary schists	61, 62, 356
746	Mo (Cu)	Isbister showing, west of Elizabeth Lake	06	mo	pink pegmatite sills, in part controlled by N-trending fault zone	102, 123
747a	Mo (Fe)	Pete (Sucker) Lake	06	mo, py, po	biotite gneiss with pegmatite sills	102, 112, 170
747b	Fe (Cu, Mo)	10 km southwest of 747a, Stewart Peninsula	06	py, po, cp, mo	biotite gneiss; molybdenite in one pegmatite vein	102, 112, 170
748	Ni (Cu, Fe)	Muskwa group, Flatland Lake	06	not stated; Ni, Cu in assays	weathered basic intrusive	18
749	Ni (Fe, Cu, Cr, Co)	Mac, Nibben & Complex claims, Nemeiben Lake	06	po, pn, cp	gabbro to serpentinite; sulphides in disseminations and lenses	18, 51, 84, 85, 86, 88, 93, 96, 111, 174, 250, 252, 253, 323, 419, 420
750	Pb (C, Fe, Zn)	CBS 8 & 1470, Wad & Guy claims, Eliason Island	06	gf, py, po; Pb in assays	pyritic metasediments interlayered with hornblende gneiss; strong shearing	449
751	Ag (Fe, Cu, Au, Mn, Mo)	Laguerita claim (S-95321), North Contact Lake[1]	07	mal, ep; assay: Ag, Au	epidotized calc-silicate rock on east margin of diorite pluton	49, 93, 96, 337
752	Ag (Au, Fe)	Olga claim (S-95320), southwest corner of Contact Lake	07	py; assay: Ag, Au	white quartz vein in diorite-gabbro	49, 93, 96, 337
753	As (Fe)	Home claims 1 & 2, North Contact Lake[1]	07	asp, py	quartz veins with calcite, blebs and veinlets of arsenopyrite and pyrite in felsic gneiss (tuff?)	93, 96
754	Au (As, Cu, Fe, Ag)	Preview North & South zones	07	Au, asp, cp, py, po; Ag (assay)	sheared southeastern contact of gabbro sill; local gold in quartz veins	18, 59, 79, 93, 96, 400, 412, 414, 445
755	Au (Ag, Cu, Fe, Pb, Zn, As)	Eureka claims 1 to 9, Nemi-Day group & ML 5127, Heyer Bay	07	Au, cp, bo, py, gn, sp, asp	quartz veins in E-W shear in volcanics; chalcopyrite carries gold and silver	18, 20, 46, 93, 96, 256, 257, 258, 259, 265, 267, 271
756	Au (As, Fe, Cu)	Lucky Strike, Sulphide Lake	07	Au, asp, cp, py	quartz veins in feldspar porphyry are concordant with NE-trending foliation; veins contain pyrite and arsenopyrite	18, 93, 96, 167, 400, 445, 446
757	Au (Pb, As, Zn, Fe, Ag)	Bee claims, ML 5061 & Galena showing, southern Sulphide Lake	07	Au, asp, gn, sp, py; Ag (assay)	quartz veins in NE-trending iron formation and felsic volcanics, and N-trending fractures	18, 42, 66, 68, 93, 96, 391, 400, 445
758	Au (Fe, As, Pb, Cu)	PAP 'A', South & 'B' zones, Pap Lake	07	Au, py, po, cp, gn, asp	concordant quartz veins in shear zones in diorite; arsenopyrite, pyrite carbonate in sheared wall rocks	18, 59, 79, 93, 96, 109, 333, 400, 445
759	Au (As, Pb, Zn, Ag, Fe)	Dee no. 2, S & O no. 3, Discovery & South Camp showings on Sulphide Lake	07	Au, py, asp, gn, sp	quartz vein in NE-trending fracture in feldspar porphyry	18, 59, 93, 96, 104, 339, 400, 405, 410, 445, 446
760	Au (Fe, As)	Joe showing, Preview Lake	07	Au, py, asp, po	quartz lenses with pyrite and arseno-pyrite, parallel to NE foliation, in felsic volcanics and greywacke	59, 93, 96, 445

[1]local name for a small lake that drains into Contact Lake from the north

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
761	Au (Fe, Cu, As)	Gem claims, south of Lynx Lake	07	Au, py, asp, po	gold in quartz lenses and stringers in 'lean' iron formation	18, 53, 93, 96, 422
762	Au (Ag, As, Fe)	Dee no. 1, S & O no. 13 & Main camp showings, Sulphide Lake	07	Au, asp, py	quartz and arsenopyrite are boudinaged in sheared diorite	18, 52, 59, 93, 96, 104, 405, 399, 413, 416, 445, 446
763	Au (Pb, Zn, Cu, As, Fe)	Studer A, B, C, D, E, F & G zones on the Hi-Ho claims & ML 4994, CBS 1848 & 4979, Sulphide Lake	07	Au, cp, py, asp, gn, sp	lean iron formation (A, B and F zones); quartz stockworks in volcanics (C zone); NNE-trending quartz veins in volcanics (D zone); quartz in NE-trending shears in volcanics and iron formation (E zone)	64, 93, 96, 128, 167, 168, 392, 400, 417, 421, 415, 445
764	Au (Ag, Fe, As, Ni)	Clearwater A & B, Avail no. 1, & Veil nos. 4 & 5 claims, Mekewap Lake	07	Au, py, asp; Ag (assay)	associated with 'lean' iron formation and NE shearing	59, 64, 93, 96, 169, 398, 409, 413, 414
765	Au (Ag, Cu, Fe, Pb)	CBS 1051 (later 1046), Upises Lake	07	Au, cp, py, gn; Ag (assay)	NW-trending quartz-filled shear between gabbro and felsic-mafic volcanics	93, 96, 260, 266, 262, 264, 268,269, 270
766	Au (Pb, Zn, Cu, Fe, As)	Sokyo-Tyon claims, Hebden Lake	07	Au, gn, sp, py, asp, gn	gold in quartz veins in intercalated conglomerate and volcanics, with aplite; small pods of galena, sphalerite	93, 96, 149, 225, 361
767	Au (Cu, Ag)	north shore of Teneckye Lake	07	cp, vs; assay: Au, Ag	skarn along south contact of gabbro and volcanics; veinlets of chalcopyrite	93, 96, 266, 270, 268, 269
768	Au	north shore, near west end of Ramsland Lake east (North occurrence)	07	Au	fine-grained felsic rocks intercalated with conglomerate; gold and pyrite in quartzose fractures in felsic tuff	93, 96, 114, 178, 180, 179, 340, 362
769	Au	north end of large peninsula, south shore of Ramsland Lake east (Centre occurrence)	07	Au	gold in siliceous shear fractures trending 000° /40° E in tuff and diorite; gold associated with gabbro veins	93, 96, 114, 178, 179, 180, 340, 362
770	Au (Fe, Cu)	92 m south of east bay of Ramsland Lake east (East occurrence)	07	Au, py, cp	in quartz veins in fractured fine-grained granite	93, 96, 114, 178, 179, 180, 340, 362
771	Au (Fe)	east of Contact Lake bush road & 210 m east of Ramsland Lake west (South occurrence)	07	py; Au (assay)	interlayered felsic gneiss and conglomerate, with quartz veins along a N-trending ridge	93, 96, 114, 178, 179, 180, 340, 362
772	Cu (Fe)	near southeast shore, Contact Lake	07	cp, py, po	fractures, quartz veins in interlayered diorite and metasediments	129, 409, 414, 445
773	Cu (Fe, Au)	Fred & Lori claims, Freda & Caribou Lakes	07	cp, py, po; Au (assay)	pegmatite veins in calc-silicate gneiss	93, 96, 130, 131
774	Cu (Fe, Au, Ag)	CBS 613 & S-89283 to S-89286, Mullock Lake	07	cp, bo, cv; assay: Au, Ag	schistose porphyritic diorite(?); chalcopyrite and quartz are sporadic along fractures	93, 96, 339
775	Cu (Fe, Au)	BJJ & Nup claims, Poulton Lake	07	cp, py	sulphide-filled joints and veins in fractured porphyroblastic hornblende gneiss	93, 96, 196, 407, 408, 411

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
776	Cu (Fe, Pb, Zn, Ag)	Zita showing, west of Ramsland Lake	07	cp, py; assay: Pb, Zn	hornblende gneiss and felsic gneiss, local quartz; sulphide veins in shears and joints	93, 96, 179, 180, 340, 450
777	Cu (Au, Fe, Ag)	Don, Marrion-Harry, Karren, Andy-Bay & AB claims, between Pipestone Bay & Bulbick Lake	07	cp, po, py; Ag (assay)	large pyrrhotite bands in felsic gneiss; large quartz veins cut sulphides	5, 17, 93, 96, 187, 211, 348, 393, 397
778	Cu (Ag, Ni, Fe)	CBS 1051, Teneycke Lake	07	cp, po, py	shears in quartz-biotite-feldspar gneiss; pyrite-chalcopyrite veins cut pyrrhotite zones	260, 261, 262, 263, 264, 266, 268, 269, 270
779	Cu (Fe)	Pete claims, east of MacKay Lake	07	cp, py	sulphide veins and blebs in felsic gneisses and schists	93, 96
780	Cu (Ni, Au, Fe)	CBS 1047, between Teneycke Lake & southern part of MacKay Lake	07	cp, po; Au (assay)	quartz diorite and gabbro plug	93, 96, 261, 263
781	Cu (Fe)	Gid 1 to 6, Anne 1 to 4 & Pat 1 to 2 claims, north of MacKay Lake	07	cp, py	diorite/gabbro remnant in quartz-eye granite	93, 96, 132, 339
782	Cu (Fe)	MacKay Lake west	07	cp, po, py, mag	fine-grained felsic and mafic layered quartz-biotite-hornblende-feldspar gneiss	93, 96, 133
783	Cu (Fe)	Otter Lake project, McNichol Lake	07	cp, po, py	hornblende-rich rock, calc-silicate bands	227, 351
784	Cu (Ag, Au, Fe)	Pat claim 1, Rob Lake	07	cp, po, py; assay: Ag, Au	sheared carbonate-rich band in hornblende gneiss; the northeastern extension of the Anglo-Rouyn mineralized horizon	6, 93, 96, 348
785	Cu (Fe, Au)	FCI & Minto claims, Lee Lake	07	cp, py; Au (assay)	banded hornblende-biotite gneiss and felsic gneiss	93, 96, 189, 224
786	Cu (Fe, Au)	Kroy claims, west of Bulbick Lake to Dam & Crescent Lakes	07	cp, py, po; Au (assay)	felsic granulites, calc-silicate rocks (on strike with Anglo-Rouyn host rocks)	5, 93, 96, 187, 211, 348
787	Cu (Fe, Au)	Anglo-Rouyn B-, C-, D- & E-Lake zones	07	cp, po, py; Au (assay)	eastern extension of Anglo-Rouyn host rocks and mineralization; topographic lows are the result of sheared and pyritic nature of host rocks (gossan)	5, 7, 9, 10, 44, 93, 96, 115, 116, 212, 231, 348
788	Cu (Fe, Ni, Au, Ag)	Waden Bay Syndicate, Wadin Bay & Aikenhead Lake to Sulphide Lake	07	cp, py, po; assay: Au, Ag	argillite, gossan weathering	93, 96, 117, 438, 439, 440, 441, 442, 443
789	Ni (Mg, Fe, Cu, Cr)	CBS 1400, Max claims 19 & 30 & Moonstone claim 2, Hunt Lake	07	py, po, tk	marble intruded by peridotite with serpentinite, and talc	37, 45, 227, 429
790	Mg (Cr)	Hunt Lake	07	asb, cr	veinlets of asbestos in ultrabasic rocks	227
791	Pb (Zn, Fe, Cu, Ni, Au)	north end of North Contact Lake[1]	07	gn, sp, py	in joints and fractures in quartz veins in pyritic felsic gneiss	93, 96, 114, 179, 180, 340, 362

[1]local name for a small lake that drains into Contact Lake from the north

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
792	Pb (Zn, Ag, Au, Cu, Fe)	north shore of eastern half of Contact Lake	07	gn, py, po; assay: Au, Ag,	intercalated felsic schists and gneisses	47, 93, 96, 129, 414
793	Fe (Cu, Zn, Ni, Au, Ag)	north shore of Lac la Ronge, Stroud Lake, Mag Lake	07	mag, po, py	amphibolite contains magnetite lenses south of Mag Lake	93, 96, 207
794	Fe (Cu, C, As)	Jap & Paj claims, south of Lynx Lake	07	py, po, gf, asp	northwest of gabbro plug in supracrustals	11, 12, 13, 14, 15, 93, 96, 197, 389, 448
795	Mg	1.6 km north of Bear Island, Pipestone Bay	07	tk	in small ultrabasic plug	93, 96
796	Mg	west of Toland Island, Pipestone Bay	07	tk	in brecciated and sheared ultramafics	93, 96
797	U	CBS 2911, Muledeer-Hale Lakes area	07	uph	coarse pegmatite	50, 160, 181, 210, 227
798	U (Th, Cu, Fe, Mo)	Pix claims, Freda Lake	07	ala, ra, cp, py, mo	intercalated hornblende schist and 'granite'; mineralized veins oriented 160° /20° W	67, 93, 96, 130, 131, 351, 401
799	Zn (Cu, Ni, Fe, Au, Ag)	MM, Tow & SL claims, CBS 21, 1450, 1451 & 1454, Jepson Lakes	07	cp, po, py; assay: Au, Ag,	disseminations in amphibolite and andesite	43, 93, 96, 147, 191, 208, 209
800	Zn (Fe, Cu, C, Ag)	CBS 1390 & 1433, Little Deer Lake	07	gf, py, po; assay: Ag, Zn	metasediments near north side of basic pluton	389, 435
801	Cu (Fe, C)	Pitching Lake prospect (Glenn Uranium Mines), west shore of Pitching Lake	08	cp, py, po, mal, az, bo, gf	hornblende-calc-silicate gneiss band in 'granite', coinciding with strong EM and weak magnetic anomalies	18, 24, 106, 201, 202, 203, 204, 245, 297, 298, 326, 358
802a	Fe	CBS 780 & 779, OX claims 1 to 6, Big Whitemoose Lake	08	po, py	disseminations in calc-silicate gneiss fracture fillings in quartz-biotite gneiss and amphibolite	245, 279, 280, 282
802b	Fe (Cu, Ni)	CBS 779, Whitemoose River	08	po, py, cp	disseminations and bands in calc-silicate gneiss, amphibolite and migmatite	245, 279, 280, 282
803a	Fe (Cu, C)	PCB claims, Keg Lake	08	po, py, gf	disseminations and bands in chloritic and graphitic amphibolite	245, 273, 274, 275, 277, 342
803b	Fe (Cu, C)	CBS 775, Keg Lake	08	py, po, gf	disseminations and veins in biotite gneiss	245, 273, 274, 275, 277, 342
804	Fe (C)	CBS 777, Egg claim 4, Alexander Bay, Pitching Lake	08	py, po, gf	garnet-biotite-hornblende gneiss, hornblende gneiss cut by pegmatite	245, 273, 276
805	U	La Ronge Uranium Mines Ltd., Drope Lake	08	bec, lie, uph, ur	flat-lying pegmatite sill	80, 210, 227, 358
806	U (Th)	Hub claims 1 to 10 & 15 to 21, Thomas Lake area	08	ur, ala, mz, uph	in biotite in pegmatite, and in late fractures	162, 181, 227, 232
807	Cu (Fe, Au)	north of Knight Lake	09	po; assay: Au, Cu	pyrrhotite-quartz-diopside layers alternate with dark diopside layers and thin pyrrhotite layers	316

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
808a	Cu (Fe)	Hornseth & Lornson Lakes	09	py, po, cp	quartz-feldspar-biotite-sericite gneiss; chalcopyrite in calc-silicate gneiss	3, 199, 281, 316
808b	Fe (C)	south end of Hatch Lake	09	po, gf	calc-silicate gneiss and hornblende gneiss	3, 199, 281, 316
809	Cu (Fe, Ni)	Ahasew & Palmer Lakes area	09	cp, bo, py, po	disseminations and fracture-fillings in hornblende granulite, associated magnetic anomaly	134, 316
810	Au	HM Group, Otter Lake	10	Au (assay)	quartz veins in E-trending quartz-plagioclase-biotite gneiss	315, 350
811	Au (Fe, Cu, Ni, Zn)	CBS 858, Kie claim block 10 & Kie claims 31 to 36 & 39 to 42, Dead (Nipew) Lake	10	py, po, cp; Au (assay)	biotite gneisses	278, 289, 314, 324
812	Cu (Fe, Au, Ag, Zn)	Quartz claims 8 & 9, Esmay Lake	10	py, po, cp; assay: Au, Ag	fine-grained basic volcanics	63, 71, 315, 324
813	Cu	east shore of Devil Lake	10	cp	fine-grained basic volcanics	192, 240, 315
814	Cu (Fe, Cu)	CBS 503, south of Bellows Lake	10	cp, mal, py, po, gf	banded volcanics, coinciding with EM and magnetic anomalies	314, 334, 335
815	Cu (Fe, Zn)	Grab claims 1 to 21, west of Bellows Lake	10	po, py, cp, sp	quartz-biotite gneiss and quartzite	314, 347
816	Cu	Kap claims, west of Berg Lake	10	mal	andesite intercalated with hornblende gneiss, sericite schist and mylonite	314, 336
817	Cu (Fe)	Milner Lake	10	cp, pc, mag	trachytic andesite	314, 336
818	Cu (Fe)	Welk Lake	10	cp, po, mag	trachytic andesite	314
819	Cu (Fe, Ni, Co)	Cam, Rock & Base claims, CBS 622, Bassett Lake area	10	cp, py, pn, po	gabbro/quartz diorite; magnetite and pyrrhotite cause strong aeromagnetic anomaly	18, 72, 73, 135, 136, 137, 314, 336, 402, 403, 406,
820	Cu	Cathro Lake	10	native Cu, mal	in amygdule in andesite	314, 336
821	Cu (Fe, Au, Ag)	Rattler Creek	10	cp, po, py; assay: Au, Ag	disseminated in quartz-plagioclase-biotite gneiss	315
822	Cu (Fe, Ag)	P.W. claims, Robertson Falls–Twin Falls, Eva Lake	10	cp, py, po; Ag (assay)	calcareous supracrustals; pyrrhotite-chalcopyrite zones give good EM response	18, 75, 105, 315, 368, 444
823	Cu (Au, Ag, Mo)	between Bridgeman Lake & Smith Bay, Otter Lake	10	cp, mo; assay: Ag, Au	hornblende and calc-silicate gneisses, close to granite	89, 315
824	Cu (Fe, As, C)	CBS 852 & Kie claim block 4, Hine & Bielby Lakes	10	cp, py, po, asp, gf	disseminated in calc-silicate gneiss; coincide with EM ground anomalies	314, 283
825	Cu (Fe)	between Wilf Lake & McNichol Bay	10	cp, py, po	pyrite-pyrrhotite, with local chalcopyrite, occurs in shears in quartz-plagioclase-biotite gneiss	315, 351
826	Cu (Ni, Fe, Au)	Sum claims 1 to 11, Dead Lake	10	po, pn, cp; Au (assay)	west side of gabbro plug, intruding granitic rocks	314, 377, 436
827	Cu (Fe, Ni)	Hay claims 1 to 10 & Chalco claims 1 to 10, Hayman Lake	10	cp, py	granitic and dioritic intrusives	376, 436

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
828	Cu (Ni, Ag, Au, Fe, Co)	CBS 1650 (Studer Mines), east of Hayman Lake	10	cp, py, po, bo	lenses in sheared and fractured zones in basalt; mineralization is in fractures cutting siliceous shear zones	63, 314, 418
829	Cu (Ni, Fe, Pt)	CBS 35, Bandar Lake	10	py, po, cp; Pt (assay)	disseminations and fracture fillings in gabbro sill	29, 63, 69, 70, 198, 315, 354
830	Cu (Fe)	east side of Two Lake Island, Hayman Lake	10	cp, po	biotite-quartz-feldspar gneiss intruded by granitic rocks	193, 314
831	Cu (Fe)	east side of Two Lake Island, Hayman Lake	10	cp, po	biotite-quartz-feldspar gneiss intruded by granitic rocks	193, 314
832	Cu (Fe)	southwest of Bellows Lake	10	cp, py	at contact of hornblende gneiss and granite	193
833	Cu (Fe)	Kas claims & CBS 514, on SW-facing peninsula in Nipew (Dead) Lake	10, 11	cp, po, py	disseminated in hornblende-biotite gneiss near granite	54, 138, 314
834	Cu (Fe, Au, Ni)	CBS 691, west of Champagne Island, Bellows Lake	10	cp, native Cu, py, po	quartzite	90
835	Fe	McComb Lake	10	mag	magnetite zone coincides with high aeromagnetic anomaly	314
836	Ni (Fe, Cu)	Mal claims 1 to 4 & CBS 542, Mal Lake	10	po; assay: Ni, Cu	disseminated to massive pyrrhotite in quartz diorite	188, 314, 375
837	Pb (Fe, Cu)	east of Nipew (Dead) Lake	10	py, po, gn, cp	biotite gneiss	193
838	Fe	Nipew (Dead) & Bellows Lakes	10	po	quartzose layers in partly calcareous rocks	314
839	Fe (Cu)	west of Bellows Lake	10	po, cp	biotite gneisses, minor chalcopyrite with pyrrhotite	314
840	Fe (C, Cu)	Ball, Naheyow & Reid Islands, Otter Lake	10	po	pyrrhotite in calc-silicate band between granodiorite gneiss and hornblende gneiss	315, 352
841	Fe	Benjamin Lake	10	po	quartz-biotite gneiss and quartzite	190, 314
842	Fe	Clark Falls, north shore of Hayman Lake	10	py, po	shear in quartz-biotite gneiss at contact with granite	193, 314
843	Fe (Cu, Ni)	Kie claim 9 & CBS 857, Nipew (Dead) Lake	10	py, po, cp	biotite-quartz-feldspar gneisses	278, 285, 289, 314
844	Fe (Cu, Ni)	Kie claim 5 & CBS 853, Nipew (Dead) Lake	10	py, po, cp	hornblende gneiss	278, 285, 289, 314
845	Fe (Cu)	Kie claim 7 & CBS 855, Nipew (Dead) Lake	10	py, po, cp	biotite gneiss with hornblende gneiss and calc-silicate gneiss	278, 288, 289, 314
846	U	Kaz claims 1 to 8, Mus claims 1 to 8 & CBS 1430, Milner Lake	10	car	shears and biotite zones in pegmatite	314, 218, 424, 425
847	U (F)	Kaz claims 1 to 8, Mus claims 1 to 8 & CBS 1667, Milner Lake	10	uph, fl, aut	at contact of granitic gneiss and pegmatite	218, 314, 424, 425

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
848	Zn (Pb, Ag, Fe)	Borys Lake property	10	sp, gn, po; Ag (assay)	NE-trending fault zone in biotite gneiss, minor hornblende gneiss and quartzite; mineralization sporadic over 890 m in Main Zone; granodiorite sill is intrusive	139, 171, 172, 173, 314
849	Cu (Ni, Co, Fe, Pb)	Rosie (later Hood) group, Nipew (Dead) Lake	11	cp, po, py, mag, hem	small gabbro plug, with sparse sulphides, intruding granodiorite	87, 140, 314, 331
850	Cu (Ni, Fe)	CBS 695 & 604, McIntosh & Nipew (Dead) Lakes area	11	cp, py, po	biotite schist, quartzite, skarn and breccia zones	40, 76, 243, 338
851	Ni (Au, Ag, Cu, Fe)	CBS 1025, north-western shore of Nipew (Dead) Lake	11	cp, po	biotite migmatite and quartz-biotite gneiss	243, 322
852	Fe	Renz Lake	11	py, po	disseminated and concordant sulphides in calc-silicate and biotite gneisses; plagioclase is greenish coloured	185, 246
853	Fe	Little Crooked Lake area	11	py, po	calc-silicate and biotite gneisses intruded by granitic rocks	246
854	Fe	Black Bear Island Lake	11	py, po	calc-silicate and biotite gneisses	246
855	Fe (Cu)	Beaudry & Kavanagh Lakes area	11	py, po, mag, cp	metavolcanics and metasediments; strong aeromagnetic anomaly (magnetite)	139, 243
856	Fe (Ni, Zn, C, Cu)	Stratton Lake area	11	py, po, gf, cp	disseminated to massive pyrite and pyrrhotite in biotite-hornblende gneiss and hornblende calc-silicate gneiss	243, 287, 289
857	Zn (Pb, Ag, Cu, Fe)	Will claim group, Nipew (Dead) Lake area	11	sp, gn, py, po, cp; Ag (assay)	calc-silicate gneiss lenses and quartz-biotite gneiss; pyrite- and pyrrhotite-rich band causes ground magnetic anomaly	18, 233, 234, 235, 238, 243, 332
858	Zn (Au, Cu, Fe, Ni, C)	Can claims, Kitchemonia Lake	11	sp, py, cp, po, gf	calc-silicate gneiss and biotite hornblende gneiss; along strike from SMDI No. 857	234, 286, 288, 314
859	Fe	south shore of Campbell Lake	12	py, po	sheared migmatites, hornblende rich or adjacent to hornblende gneiss	247
860	Fe	Wamninuta Island, Black Bear Island	12	py, po	sheared migmatites, hornblende rich or adjacent to hornblende gneiss	247
861	Fe	Skwarchuk Lake	12	py, po	sheared migmatites, hornblende rich or adjacent to hornblende gneiss	247
862	Cu (Ni, Fe)	Bud claims 3 to 7	13	cp, po	biotite migmatite	175, 338
863a	Fe (Cu, Zn)	Duck Bay claims, Hicks Island,	13	py, po, sp, cp	interlayered biotite-quartz-feldspar gneiss and calc-silicate gneiss	30, 77, 239, 338
863b	Fe	south shore of Meyers Lake	13	py, ma	graphitic schists, strong EM anomaly	30, 77, 239, 338
864	Fe (Cu, C)	Eulas & Campbell Lakes area	13	lm, gf, py, po, mal	rusty, graphitic metasediments	338

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
865	Fe (U)	Acorn & Lanes Lakes area	13	py, po, uph	chloritic and graphitic quartz-biotite schists interlayered with quartzite; minor uranophane 1.8 km south of Acorn Lake	165, 166, 432
866	Cu (Ni, Fe)	Toppings & McTavish Lakes area	14	cp, py, po, bo	low-grade mineralization on east side of pyroxenite plug	18, 38, 255, 313, 338
867	Cu (Ni, Fe)	Done, Kelly & C.O. claims, Keith & McTavish Lakes area	14	cp, po, mag(?)	disseminated sulphides in pyroxenite sill which coincides with ground magnetic anomaly	18, 40, 312, 338
868	Cu (Ni, Fe, C)	Bella claims 1 to 3, Separatist & Olsen Lakes area	14	cp, po, py, gf	sulphide-rich gossans in quartzite & paragneiss coincide with airborne EM anomaly	18, 39, 78, 338
869	Cu (Ni, Fe, U, C)	Kim claims, 2 km southeast of McIntosh Lake	14	gf, uph; Cu in assays	paragneiss; local uranophane in pegmatite and felsic gneisses	176, 338
870	Cu (Ni, Fe)	Tim claims, Waters & McIntosh Lakes area	14	po, py; Cu in assays	biotite gneiss cut by granite	177, 338
871	Fe	Allan & Narrow Lakes area	14	lm, py, po	calc-silicate gneiss intruded by granite; disseminated pyrite and pyrrhotite	78, 338
872	Cu (Fe)	Pre claims 1 & 10, north of Esmay Lake	15	cp, po, py	quartz stringers and lenses in andesite; ground magnetic anomaly corresponds to pyrite in andesite and chalcopyrite in diorite	324, 345
873a	Cu (Fe)	Kazan claims 1 to 15, Cockwill Lake	15	cp, py, po	silicified volcanics; chalcopyrite in fractures near shears	183, 324, 329
873b	Fe	CBS 727, southwest of Slaney Lake	15	mag, po	magnetite and pyrrhotite in minor conductors	183, 324, 329
874	Cu (Fe)	Vuku claim 4, northeast of Esmay Lake	15	native Cu, cp, py	1.5 m tuff bed, with 0.3% Cu, in porphyritic andesite and basalt	184, 324, 328
875	Cu (Fe, Zn, Au)	Keep, Ken & Kel claims on northwest & southeast shores of Forbes Lake	15	cp, py, po, sp; Au (assay)	pyrite and pyrrhotite in shear in hornblende calc-silicate gneiss (south zone); parallel zones of pyrite-pyrrhotite in calc-silicate gneiss (north zone)	2, 18, 91, 194, 324
876	Cu (Mo, Au, Ag, Zn, Ni, Cr, Fe)	Lee - CBS 526, south of Forbes Lake	15	cp, po, py, mo; assay: Au, Ag	sulphide in epidote-rich lenses in dacite, volcaniclastics and calc-silicate gneiss	63, 141, 143, 213, 324
877	Cu (Fe)	CBS 744 & Jo claim group, Kruger Lake	15	cp, py, po	basic volcanics intruded by granitic rocks	182, 324
878	Cu (Fe)	Quartz claim 19, Esmay Lake	15	cp, py, po	sulphide veinlets in shears in andesite	71, 324
879	Cu (Mo, Fe, C)	CBS 663, south end of Forbes Lake	15	cp, mo, py, po, gf	0.6 cm chalcopyrite-molybdenite vein (main show); pyrite, pyrrhotite and graphite in feldspar granulite and gabbro	324, 355
880	Ni (Fe, Cu, Co, Pt, Pd)	area staked as Ivy Group, then as CBS 522, finally as ML 5164, 0.4 km northeast of north end of Gochager Lake	15	po, py, cp, bo	gabbro plug (300 x 1000 m) with core rich in massive nickeliferous pyrrhotite	1, 63, 143, 324, 373

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
881	Ni (Fe, Cu, Au)	Jac claims & CBS 834 to 846, in Forbes–Bateman–Larocque Lakes area	15	py, po	banded calc-silicate gneiss with minor pyrite and up to 60% pyrrhotite	290, 291, 292, 293, 294, 324
882	Fe (C)	east side of Kempton Lake	15	po, gf	interlayered hornblende gneiss and biotite gneiss	294, 324
883a	Fe (Cu, Co, Zn, Ni)	CBS 574, Gochager & Weaver Lakes	15	po, py, cp	gossaned biotite gneiss and interlayered calc-silicate gneiss; pyrrhotite decreases to the northeast with decreasing calc-silicate content	324, 379, 381, 384
883b	Fe (Cu)	1 km north of Weaver Lake	15	po, py, cp	calc-silicate gneiss, quartz-feldspar gneiss	324, 379, 381, 384
884	Fe (C)	east of Kerr Bay, Whetter Lake	15	py, gf, po, lm	fault zone along contact between biotite gneiss and granite	324
885	Fe (Ni, Cu, Co, C)	CBS 612, Gochager & Weaver Lakes area	15	py, po, gf, cp	gossan zones on sulphide bands in biotite paragneiss	324, 378, 380, 382, 383, 345
886	Au (Cu, Ag, Fe)	Garskie & Coffyne veins, Jolu claims, Star Lake area	16	po, py, cp; assay: Au, Ag	discontinuous quartz-filled fractures striking 040°; quartz stringers occur in shear zones cutting metavolcanics; Garskie vein grades less than 2 g/t Au, Coffyne vein less than 0.7 g/t Au	57, 63, 244, 249, 302
887	Au (Cu, Fe, Ag)	Star claims 1, 2 & 6	16	po, py, cp; assay: Au, Ag	NE-trending quartz-filled fractures; quartz stringers occur in shear zones cutting metavolcanics	56, 58, 63, 244
888	Au (Ag, Fe)	Como & Blyler Lakes (Alpat & Tricker Lakes area)	16	Au, py; assay: Au, Ag	gold occurs in two quartz veins in diorite north of contact with metasediments	244, 319
889a	Au (Ag, Fe)	Kahn 9 & 21 claims; Kahn 18 zone is 25 m southeast of Kahn 21 zone, immediately northwest of Upper Fork Lake	16	Au, py, po; Ag (assay)	vein 18 with sheared ribboned quartz occurs in a dragfold in quartz monzonite; vein 28 is approximately parallel to vein 18 and the 21 zone	63, 64, 244, 320
889b	Au (Ag, Fe, Cu, As)	Star Lake Mine (21 zone), ML 5118, 1.5 km northeast of Star Lake	16	Au, py, cp, asp; Ag (assay)	in 21 zone, quartz veins occur in footwall of shear zone in mylonites in quartz monzonite of the composite Star Lake Pluton	33, 48, 64, 107, 108,155-159, 236, 237, 248, 249, 299-311, 343, 344, 364, 365-368, 371-372, 395-396
890	Au (Ag, Cu, Zn, Fe)	ML 5100 & Pie claim 1, Rush Lake	16	Au, py, po; Ag (assay)	erratic gold values in NE-trending quartz vein within shear in basic volcanics	16, 19, 57, 152, 153, 154, 244
891	Au (Ag, Fe, Cu)	Tamar claims 1, 5 & 6, Fork Lake area	16	py, cp; assay: Au, Ag	430 m long NE-trending shear zone cuts N-trending contact between mafic volcanics to the west and diorite to the east; irregular quartz veins in shear zone contain pyrite; assays are erratic	63, 244, 320
892	Cu (Fe, Zn)	Don Fisher Syndicate, north shore of Settee Lake	16	po, py, cp	garnet-biotite gneisses intruded by pegmatite and granite dykes; contact zones are well silicified, altered and mineralized with sulphides	25, 74
893	Cu (Fe, Ni, Au, Ag)	Thomas claims 1 to 5 & CBS 555, 678 & 550, Roundish Lake	16	cp, py, po, mag	gabbroic intrusive in basic volcanics	41, 295, 320, 416

SMDI No.	Elements Present	Name of Occurrence/ General Location	NTS 73P-	Minerals Present	Host Rock/ Structures and Remarks	Reference Numbers
894	Cu (Zn)	McLennan Lake	16	cp, sp	chalcopyrite disseminated in metavolcanics; sphalerite in quartz vein in metavolcanics	244
895	Cu	southeast corner of Kahn claim 25, 300 m north of Upper Fork Lake	16	native Cu	basic volcanics interlayered with NNE-trending felsic to mafic volcanics; copper not confined to fractures or rock unit	244, 320
896	Cu (Fe, Ni, Ag)	Studer showing, CBS 552 & 556, Neyrinck & Frog Lakes	16	cp, po, py, mag	leucodiorite; blebs and rare veinlets of sulphides in 30 x 150 m zone	55, 63, 144, 244, 374
897	Fe	west shore of Alpat Lake	16	po	biotitic metasediments within andesite and basalt	145, 244
898	Fe	north end of small island near south shore of Colin Lake	16	po	biotitic metasediments	145, 244
899	Fe	area between Tricker & Skalicky Lakes	16	po, py	quartz-biotite gneiss; four trenches on an E-trending ground magnetic anomaly	4, 146, 161, 200, 244 346, 330
2066	Au (Fe)	Joyce zone, Transom Lake south, 1 km north of Star Lake road junction with Hwy. 102	16	Au, py	visible gold, and gold in pyrite in intensely sheared quartz vein in NE-striking shear zone cutting quartz monzonite/granite pluton; assays of drill core gave maximum of 16.0 g/t Au over 0.7 m and range of 0.116 to 16.0 g/t Au over lengths of 0.4 to 3.5 m in five different holes	305, 307
2073	Au (Fe)	Jasper's Pond (Fork Lake) showing (James Jasper, Muskeg & Roxy zones), approximately 1 km south of south end of Fork Lake	16	Au, py	visible gold and gold in pyrite in quartz vein in shear zones in quartz monzonite/granite pluton; assays of drill core from James zone gave maximum of 208.09 g/t Au over 3.7 m and range of 0.89 to 208.09 g/t Au over lengths of 0.5 to 6.0 m in seven different holes	309, 310
2081	Au (Fe)	North Lake showing (Radcliffe Resour. Ltd.), 3 km north of Mullock Lake near Hwy. 102	07	Au, py	visible gold with pyrite in quartz veins cutting quartzite in contact with mafic volcanics along major fault zone; assays of drill core gave maximum of 39.89 g/t Au over 0.92 m and range of 3.73 to 39.7 g/t Au over lengths of 0.91 to 5.5 m in six different drill holes	Radcliffe Resources Ltd. news releases, Oct. 1/87 to Feb. 12/88 (summary in SMDI file)

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